GOVERNMENT OF NORTHERN NIGERIA

DEVELOPMENT PLAN

1962-68

Nigeria Northern Region

Ministry of Economic Planning,
KADUNA.

February, 1962

BUREAU INTERNATIONAL
-6 JUIN 196

338.984
A1
No 131

NOT
ANALYZED

DEVELOPMENT PLAN

1962-68

Contents

CHAPTER

1. Introduction and Objectives

Section A — Services Related to Production

2. Agriculture and Fisheries
3. Veterinary
4. Forestry
5. Industry
6. Development Corporations

Section B — Basic Services Contributing to Economic Expansion

7. Education
8. Communications
9. Water Supplies
10. Health
11. Co-operatives and Social Welfare
12. Town and Country Planning
13. Housing

Section C — General Services

14. Information and Television
15. Other Services

Section D — Resources

16. Resources

Appendices: Summary of Proposed Expenditure by Ministries and Corporations

CHAPTER I

Introduction and Objectives

1.1. The first development plan for Northern Nigeria embraced the period 1955 to 1960 and was laid before the Legislature in August, 1955, as a White Paper entitled "A Statement of Policy on the Development Finance Programme, 1955-60". This programme envisaged the expenditure of some £27 million in the period on capital projects, and an overall expenditure, including both capital projects and recurrent services, of £83.5 million. The objective of the programme, as reviewed from time to time by the Regional Planning Committee, have largely been fulfilled.

1.2. The programme was extended for a further two years to 1962 and was published under the title "The extension to the Development Programme, 1955-60, 1st April 1960 to 31st March 1962". This planned for a greatly increased rate of capital expenditure of over £19 million in the two years. Part of this expenditure is on major projects which could not physically be completed in the two years and will necessarily be carried over into the new planning period.

1.3. The aim of the Government is, quite simply, to ensure with all the means at its disposal the greatest possible increase in the well-being and happiness of all the people in the Region in the shortest possible time. The development of the Region's wealth of resources is essential not only to enable all to obtain an ever-increasing variety of commodities but also to provide a firm economic foundation to support the expensive social services, particularly education and health.

1.4. The greatest material assets of the Region are its natural resources. It is the aim of the Government to increase agricultural output both per worker and per acre, to increase beef and other meat production, and to exploit to a much greater extent the fisheries in the rivers and lakes. As the production increases, so will the incomes of the producers and hence of the community as a whole. Part of the production will continue to be sold overseas so that the Region will be able to play its full part in the Federation in obtaining foreign exchange to pay for necessary imports, particularly capital goods.

1.5. As output per person is increased by improved techniques, people will be released for non-agricultural work. Many of these will be absorbed into such occupations as commerce, government and local services and teaching. Others will however go into factories to make goods, many of which are at present imported, which will be required in greater and greater quantities by the community as its standard of living rises. The Government is therefore intending to pursue a vigorous industrial policy and is busy examining the Region's mineral and other resources on which many of these industries will be based.

1.6. These essential economic policies can only be executed slowly if the people are not readily familiar with modern methods and ideas. It is therefore the intention of the Government to press forward rapidly its education programme at all levels from the primary schools to the university. In addition to formal education, it will also carry out through the various media of its information services an intensive programme of public enlightenment. Increasing numbers will then have the opportunity of taking advantage of the store of human knowledge accumulated throughout the world down the years and of acquiring the skills necessary in this modern technical age. They will be able, too, to enjoy as well as benefit from making wider cultural contacts whilst at the same time obtaining a deeper appreciation of their own culture.

1.7. An essential factor both for human happiness and fully productive workers is good health. Though much has been done in recent years to reduce very greatly the incidence of some of the major diseases, the Government will pursue its policy of raising health standards. Some causes of ill-health will gradually be removed through such programmes as that for the provision of pure and adequate water supplies and for education in the true causes of diseases. Apart from these, the preventive medical services will be continued, and on the curative side many new hospitals and clinics will be established throughout the Region. With the increase of trade and industry in the Region, it will be necessary for people and goods to move rapidly from place to place. As this development takes place people will become more and more dependent on each other's activities. Good communications are essential and the Government intends to carry on with its road construction programme. Many existing roads will be reconstructed to carry far heavier traffic than that for which they were originally built.

1.8. Finally as the complexity of life will be increased it will be necessary to expand the Government's administrative services so that all may conduct their social and business affairs in peace and security and with the maximum assistance that can be offered. It is of course one of the principal aims of the Government's education and training programmes to enable it to fill at the earliest date possible all official positions in the Region with Northern personnel of the calibre and qualifications which will compare favourably with those of other Governments and to provide its full quota of Northerners in the Federal Services.

1.9. The Government confidently expects that it can continue to rely on the co-operation of its overseas friends, such as the missions, technical aid agencies and educational foundations to secure the early fulfilment of these ambitious programmes and so achieve the prosperity and happiness of the people of the Region in a spirit of mutual co-operation.

SECTION A

SERVICES RELATED TO PRODUCTION

CHAPTER 2

Agriculture and Fisheries

I. DEVELOPMENT OF BASIC NATURAL RESOURCES

Project A1 - WATER RESOURCES AND IRRIGATION

2.1. Sokoto-Rima Valley. Sokoto.

Surveys and investigations of the Sokoto-Rima Valley and Watersheds have been approved by the Government of Northern Nigeria. The total estimated cost is £838,000, and of this amount, the United Nations Special Fund contribution will be £494,000, and Government's contribution £176,000 in cash and £168,000 in kind.

2.2. Government's contribution in cash in February, 1962 (assumed date of signing the Plan of Operation agreement) will be £71,100, and it is assumed that a further £15,300 in kind will be expended by 31st March, 1962. The amount entered therefore in the Development Plan for 1962/63 is as follows:-

(a) Total Estimated Expenditure (all contributions) = £211,600

(b) Add unexpended balance of Government contributions in cash and kind in 1961/62 (£187,400-£86,400) = £101,000

(c) Add unexpended Special Fund contribution for 1961/62 = £172,900

£485,500

2.3. Yobe River Schemes, Bornu.

Reconnaissance and Soil Surveys indicate that there are some 10,000 acres of land suitable for irrigation of wheat and other crops along the right bank of the Yobe River, between Daya and Abadan. Construction work started in 1960 at Yau on the first 500 acres of the Scheme; in 1961 and 1962 the area is to be extended to 1,000 acres. Surveys and investigation are in progress for further development of 3,000 acres at Daya.

2.4. South Chad, Bornu.

Recent Soil Surveys indicate that an area of some 10,000 acres South of Lake Chad lying on the left bank of the Ebeji river is suitable for pumped irrigation schemes. Subject to availability of staff surveys and investigations will commence in 1962.

2.5. Hadejia Wheat Schemes.

Schemes to provide some 300 acres for wheat are now under construction; these will be extended to develop an area of 2,000 acres suitable for wheat cultivation.

2.6. Kano Emirate Wheat Schemes.

Schemes to provide some 200 acres for wheat are now under construction; additional land to an extent not yet determined will be brought under cultivation.

2.7. Wurno Scheme, Sokoto.

A scheme for an area of 4,500 acres was completed in 1960, but unusually high floods have caused extensive damage to the irrigation and drainage works. At Government's request, experts from the United Arab Republic recently inspected the scheme, and recommended further expenditure on rectification work. The damage will be rectified in accordance with the recommendations of the experts.

2.8. Kwarre Scheme, Sokoto.

A scheme for an area of 950 acres was constructed many years ago, but due to unsatisfactory maintenance, irrigation and drainage works have deteriorated extensively. It is therefore intended to :-

(a) reconstruct the scheme; and

(b) bring a further 1,000 acres within the scheme for cultivation of wheat.

2.9. Sokoto - Rima Fadama near Bunza, Sokoto

The Sokoto river downstream from its confluence with the Zamfara river is perennial, and it is believed that sufficient water is available in the river for irrigation of some 7,000 to 8,000 acres of fadama on the left bank below the confluence.

2.10. Bukwium and Gumi Schemes, Sokoto.

Schemes for an area of some 150 acres at Bukwium and 50 acres at Gumi were completed some years ago, but due to lack of hydrological information they have not worked satisfactorily. The funds asked for are required to redesign and construct modern permanent schemes in the areas.

2.11. Minor Irrigation Schemes, Sokoto.

Small irrigation schemes for the cultivation of wheat were commenced in 1961, and it is proposed to bring additional land under cultivation. Response from the farmers has been good, and there is little doubt that these schemes will prove successful.

2.12. Duku Scheme Extension, Ilorin.

This area of some 2,000 acres is in the Niger Valley above flood level. A scheme to irrigate 1,000 acres for rice-growing has been completed and is in operation, and provision has been made to bring the remaining 1,000 acres under cultivation.

2.13. Tungan Kawo, Niger.

Work on this scheme of 1,500 acres for rice cultivation was started in 1957, but ceased in 1959. The scheme will now be completed.

2.14. Niger Valley Investigations, Niger.

The NEDECO Soil report on the Niger Valley indicates that there are a number of areas of first class land suitable for plantation or small scale agriculture under irrigation. Surveys and investigations are planned.

2.15. Minor Schemes, Plateau and Zaria.

A number of areas in the Plateau and Zaria have been favourably reported as being suitable for cultivation of crops under irrigation. This project makes provision for carrying out known suitable schemes, and for survey and investigation of areas for further schemes.

2.16. Yedseram Valley Investigations.

It is intended to investigate the problem of apportioning water between the Ngadda and Yedseram rivers.

2.17. Purchase of Plant and Equipment.

This item covers the capital costs of all earth-moving machines and other equipment required for the projects described above. Unit costs for the various schemes will thus more accurately reflect the differences in costs between projects, as plant and equipment will be for common use on all schemes.

2.18. Hydrological Investigations, Sokoto, Kano and Bornu.

Apart from the United Nations Investigations in the Sokoto-Rima Valley, further investigations are required elsewhere in the area for irrigation schemes. In Bornu and Kano, previous investigations have been limited by staff shortage. These investigations, which are an essential prerequisite for any proposed irrigation schemes, will now be extended.

2.19. Hydrological Engineers.

It is anticipated that there will be an increase in the need for Hydrological Engineers and Technical Assistance in this form has been requested from the United Nations.

Project A2 - SOIL SURVEYS

2.20. During 1962/68 it is proposed to carry out Land Capability and Development Surveys, aimed at covering at reconnaissance level about 1/15 of the Region on a scale of 1:100,000. The surveys would provide information on soil types, main Ecological Units, and (in broad terms) present land use and land capability. A group of 8 teams consisting of 4 teams devoted to Reconnaissance Survey, 3 teams to ad hoc detailed surveys and 1 team to Vegetation Surveys will be in continuous operation.

2.21. Agro-Economic Surveys as advised by the FAO/ICA team will be carried out under the extension services. Provision is made for the expenditure of £22,600 on Transport, £600 on Camp Equipment, £300 on Survey Instruments, and £14,000 for Housing: a total of £37,500 for the six year period.

Project A3 - SOIL CONSERVATION SCHEMES

2.22. Soil conservation is an essential part of good farming and is thus the ultimate responsibility of the farmer himself. Where only simple empirical measures are required the farmers can be expected to carry them out under the guidance of the general extension staff but in many cases a system of designed structures must be installed. These must be designed by qualified staff and part or all of the constructional work carried out by the farmers under skilled supervision. Where the occasion demands the Ministry may, either alone or in partnership with the Native Authority concerned, undertake certain heavy constructional work on behalf of the farmers. All works for the control of water-erosion will be designed and executed on a catchment basis with the co-operation of all land-users in the catchment.

2.23. In accordance with the above principles, the following projects will be undertaken during the six year period. (Unless otherwise stated work will comprise survey, clearing, protective, drains, terraces, and watercourse protection, the Government contribution being computed at an overall figure of 50/- per acre).

Expenditure on Soil Conservation
(£1,000)

Project	62/63	63/64	64/65	65/66	66/67	67/68	TOTAL
Sokoto Head -waters	6	4	8	10	10	10	48
Sokoto Lower Catchment	2.5	2.5	2.5	2.5	2.5	2.5	15
N. Sudan Zone	6	3	3	3	3	3	21
Plateau Schemes	2	2	2	4	5	5	20
Zanfara Valley	15	15	15	11	10	10	76
Other Projects	5	5	5	5	5	5	30
Field Trials	1.5	1.5	-	-	-	-	3
Minor Schemes	3	3	3	3	3	3	18
Machinery & Equip-ment	37	30	11.5	10	10	10	108.5
TOTALS	78	66	50	48.5	48.5	48.5	339.5

Project A4 - MINES LAND RECLAMATION

2.24. The present policy of reclaiming worked out mining leases will continue and the programme for the establishment of tree plantations intensified. No immediate results can be expected from this project but it will ensure adequate future supplies of firewood in an area where it is now very scarce. Expenditure has been phased over a 4-year period.

II. EDUCATIONAL AND DEMONSTRATION

Project A5 - RIVERAIN SCHOOL OF AGRICULTURE: COMPLETION

2.25. This project is designed to provide a two-year course for Agricultural Assistants with an annual output of 40. The estimated cost is £220,000.

Project A6 - SCHOOL OF AGRICULTURE: EXTENSION

2.26. The output of Agricultural Assistants is to be doubled to 90 per year. This will require the following additions to the present school:

Dormitories	£45,000
Quarters for Married Students	10,000
Staff Quarters	16,000
Extension to hostel	8,000
Extension to class-rooms, etc.	8,000
Farm Buildings	3,000
Equipment, etc.	11,000
	£101,000

Project A7 - FARM TRAINING CENTRES

2.27. To achieve one of the key objectives of the Agricultural programme (i.e. provision of one extension worker to every 2,000 farmers) it is necessary to extend the programme for building Farm Training Centres to provide one in each Province. In Sokoto and Kano the output of a standard-sized institution is insufficient to meet the needs of these Provinces and they will be expanded to twice their present size. New Farm Training Centres will be built in Kabba, Plateau and Sardauna Provinces. The total provision for this project is £75,000.

Project A8 - ESTABLISHMENT OF NEW FARM CENTRES

2.28. The soil survey section of the Research Division have shown that additional Farm Centres are required to provide the essential coverage of soil and ecological zones for crop trials throughout the Region. Four Farm Centres are required to complete coverage in the main mapped zones and an additional two centres in the extreme East of the country, viz. in the new Sardauna Province. With economies, the cost of six centres has been reduced to a total of £60,000.

Project A9 - IMPROVEMENT TO EXISTING FARM CENTRES

2.29. There are more than 20 Farm Centres throughout the country directed towards multiplication of improved planting materials and livestock, and carrying on field trials under representative local conditions. The improvements planned comprise additional storage facilities (required for stocks of improved seeds produced for issue to farmers) and the fencing of valuable crops and trial areas against livestock and trespassers. Total estimated expenditure on this project for the period is £50,000 for improved and increased storage facilities and £50,000 for ring and internal fencing.

Project A10 - FARM INSTITUTES

2.30. In order to counteract the drift of agricultural workers from the land, it is proposed to build Farm Institutes in each Division. These will train primary school leavers in Agricultural practices and rural crafts. Capital costs will be kept to a minimum. Each Institute will require £1,500 for a classroom, £2,000 for a dormitory block and kitchen and £1,000 for equipment and furniture. The total cost for the 54 divisions will be £243,000.

Project A11 - ASSISTANCE TO MECHANICAL CULTIVATION

2.31. If the desired degree of expansion of agricultural production is to be achieved the early introduction of mechanised farming is essential. A "crash" programme isproposed in which demonstration will play a major part. The Ministry of Agriculture is confident that once a sufficient number of farmers are established the trend will gather momentum but extensive demonstration will be required initially. It is therefore proposed to provide £100,000 for continuation of upland and fadama tractor-hiring on an expanded scale, technical advice and supervision for owner operators and training of operators. By 1968, there will be in operation (inclusive of present equipment) six complete tractor units of 9 to 12 tractors each.

Project A12 - LAKE CHAD FISHERIES

2.32. There is a tremendous potential for the production of fish from Lake Chad. Development which was begun during the present plan period has so far been mainly experimental. During the next 6 years it is proposed to develop the full potential. The first essential is the construction of an all-season road from Maiduguri to Baga and this has been given a very high priority in the Feeder Road programme. Secondly, the output can be greatly increased by the introduction of modern fishing techniques using modern equipment. At the present time papyrus rafts are used; these restrict operations to close in-shore because of weather and can only carry very limited catches. Boats capable of going well in to the lake and carrying catches of half-a-ton must be provided. Simultaneously research must proceed and areas must be marked out to prevent over-exploitation. Work must also continue on the introduction of improved curing techniques.

2.33. The area is remote and housing and communications must be provided for the staff. Vessels will be necessary for research and for buoying areas, and navigational aids will have to be established. The site of the present station at Baga serves only a small area and it will be necessary to establish two sub-stations at Wulgo and Malamfatori.

2.34. The estimates of expenditure are:-

Buildings	
Two Senior Service Houses	£10,000
One Junior Service House	1,500
Ten Junior Service Quarters	5,000
Offices, Stores, Workshops, Curing Sheds	7,000

Vessels	
Two Survey Launches	12,000
Dinghies	1,000
Motor Transport	
Six Land Rovers	7,000
Three Lorries	4,500
Radio Communications	1,000
Development	
Stores - equipment for research, experimental purposes	5,000
Navigational Aids	3,000
Development of Improved Curing Methods	3,000
Replacement of launches, boats, etc.	12,500
Total	£72,500

2.35. Dried fish moves even now in substantial quantities to the Eastern and Western Regions, despite relatively poor curing and high transport costs. With improved techniques, production will increase sharply. The full economic potential of Lake Chad fisheries is not known but informed opinion considers an output of 100,000 tons per annum possible without danger of over-exploitation. Assuming even half this figure to be correct the proposed development in Lake Chad alone will produce an increased national income of some £4.5 million. Fish from Lake Chad will supply a very valuable high protein addition to diet which will result in better health amongst a large section of the population throughout Nigeria.

Project A13 - RIVER FISHING

2.36. There is a vast potential for fish production from the rivers of the Northern Region but their length and position create distribution difficulties. Initial plans are to concentrate efforts on the Niger, Kaduna and Benue rivers with a suitable base probably near Jebba. Emphasis is to be primarily on the development of better techniques and the introduction of modern equipment. Once improved techniques have been perfected at the base, extension work will be undertaken in fishing communities and villages.

2.37. The estimates of costs are:-

Buildings	
Three Senior Service Houses	£15,000
One Junior Service House	1,500

Junior Service Quarters	2,000
Office, Stores, Landing Stage, Net Shed, Laboratory	6,500
Vessels	
One Survey Launch	10,000
Two Dinghies	600
Motor Vehicles	
Two Land Rovers	2,400
Development	
Research, etc.	7,500
Total	£45,500

Project A14 - POND FISHING

2.38. There is considerable scope for stocking ponds, dams and (on the Plateau) mining paddocks, with fish. Much practical research is, however, necessary. The Ministry of Agriculture is about to take over the Panyam Fish Farm which will be used for experimental and breeding purposes. This will cost £54,000 over the period. The proposed plans for Lake Chad and for the stocking of rivers will take up the available resources in the early portion of the plan period; the Pond Fisheries extension programme will start by 1964/65.

Project A15 - APICULTURE

2.39 The development of apiculture, particularly in Zaria and Niger Provinces, but also elsewhere, is desirable on nutritional as well as economic grounds. Beekeeping is practised on a small scale but experience and trials have shown that for a relatively small outlay considerable returns are possible. Continuation of the programme will cost £18,000 in the plan period.

Project A16 - QUELEA CONTROL

2.40. The Quelea Bird is a pest causing a loss of over £1,000,000 worth of grain each year. A Bird Control Unit has been operating against it in Bornu Province for the past three years with considerable success. Nevertheless, the Quelea problem is becoming more acute in that it is spreading to neighbouring provinces of Adamawa and Sardauna. The problem is, in fact, international. Investigations into improved control measures are under way, but provision must be made for an immediate expansion of existing services. £40,000 per year is required for this purpose.

Project A17 - FRUIT AND VEGETABLE GARDENS

2.41. Increased production of fruit and vegetables is of great importance for improving human diet and in providing supplementary cash income. It is proposed that gardens be established in each division, associated with the proposed Divisional Farm Institutes. The gardens will not only provide improved planting material but by demonstration encourage garden irrigation and the planting of fruit and vegetables in compounds. It is planned to establish 4 demonstration gardens in 1962-63, and 10 in each succeeding year, at a total cost of £13,500, or £250 per garden.

Project A18 - TREE CROP PROGRAMME

2.42. The development of tree crop production by farmers in suitable areas is dependent on a reliable supply of well grown seedlings of selected, high yielding trees. This can best be accomplished by the expansion of existing central nurseries and the establishment of additional central nurseries in areas suitable for development. An initial investment of £15,000 plus £15,000 per annum will be devoted to this end over the six-year period. A Tree Plantation project which will also utilise these nursery facilities is assigned to the Development Corporation.

Project A 19 - ASSISTANCE TO IMPROVED FARMING

2.43. In addition to the foregoing programmes for agricultural development provision must be made for a variety of local problems and movements not catered for elsewhere, such as Master Farmers Awards. It is intended to allocate £100,000 for this purpose over the period.

Project A 20 - CEREAL RESEARCH

2.44. The Rockefeller Foundation is prepared to give financial assistance to an expanded programme of research into cereals, both sorghum and millet. The capital cost will be £136,000 towards which the Foundation will make a grant of £51,000 plus additional assistance towards recurrent costs. This programme satisfies a key recommendation of the 1961 I.C.A./F.A.O. report. In anticipation of an increased rate of industrialisation in the Northern Region it is important that a more intense programme of cereal research be undertaken to assure the increase in food production required for the creation of a labour force for industry drawn from surplus farm labour.

III. GENERAL SUPPORT

Project A 21 · BUILDINGS

2.45. The proposed development programme will require an increased administrative staff and a large number of technical experts. Both will require office accommodation and housing.

2.46. New Ministry Headquarters Block: The present accommodation is inadequate. Additional office accommodation is required for the additional headquarters staff essential for the accelerated programme of the Ministry. The sum of £75,000 has been included for this purpose.

2.47. Provincial and Divisional Offices and Stores: The great increase in fertilizer distribution, the use of insecticide sprays and the increase in the number of participating farmers mean that a very much greater volume of stores is required. Twenty offices and stores costing approximately £5,000 each are necessary.

2.48. Research Buildings: The construction of a Headquarters Laboratory Block at the Research Station was included in the current plan. Work just begun will be completed late in 1962/63 at a cost of £80,000 during the period of the Plan. This Government is sponsoring, in partnership with Rockefeller Foundation, an accelerated programme for cereal research for West Africa. Adequate research facilities for this and other essential research will cost £229,000. Improved office and stores facilities will require £100,000 and housing of the increased staff, £216,000.

Project A 22 - STORES AND OFFICE EQUIPMENT

2.49. Implementation of the Plan will necessitate an expansion of the administrative organisation. The installation of a mechanised self-accounting system is planned. Improvement in store accommodation and the introduction of card index systems are necessary to handle efficiently the increased volume of stores necessitated by the Plan. Total proposed expenditure on this project is £30,000.

CHAPTER 3

Veterinary

INTRODUCTION

3.1. The present capital value of livestock in Northern Nigeria has been estimated at £100,000,000, while the annual income derived from the sale of slaughter stock, hides and skins, and poultry products is at least £20,000,000. The 1962/68 Development Plan has been drawn up with the two objects of improving the quality, and thereby the value, of this valuable national asset and of increasing productivity by at least 5 per cent per annum.

3.2. In the field of disease control it is hoped to eradicate rinderpest completely from Nigeria and to extend considerably the areas from which tsetse will be eradicated. Production from livestock, increased by disease control, will be further improved by the introduction of more production breeds, such as the Santa Gertrudis breed of cattle, the Merino and Black-Headed Persian breeds of sheep, and the Rhode Island Red breed of poultry, and by the demonstration of improved methods of management at the Livestock Improvement Centres. A secondary breeding centre will be opened to improve the Red-Sokoto breed of goats.

3.3. These improvements will be further consolidated by an extended programme under the heading of Fulani Amenities. These comprise improved range management, water development, dry-season fodder conservation, development of improved grazing areas, and provision of supplementary cattle feeds to nomadic cattle owners under a subsidy scheme. The total expenditure on the Veterinary Development Plan will be approximately £3.5 million.

Project B 1 - RINDERPEST ERADICATION

3.4. Proposals to eradicate rinderpest from Northern Nigeria and the three adjoining territories of Niger, Tchad and Cameroons, were finalised at an International Conference held in Kano in May 1961. A grant to cover the cost of operations in Northern Nigeria has been made by A.I.D. and a co-ordinator of operations with headquarters in Kano has been appointed. The programme will be in operation by October, 1962. The programme is designed to be completed in 3 years but provision has been included in the plan for a possible extension to 4 years which may be found necessary.

3.5. Financial details of the plan are summarised as follows:-

Project B 1	1962-63	1963-64	1964-65	1965-66	Total
Rinderpest Eradication					
(i) Vaccines	8,500	8,500	8,500	8,500	34,000
(ii) Three Special Eradication Units	97,200	51,200	51,200	51,200	250,800
(iii) Border Control Posts	17,000	8,500			25,500
	122,700	68,200	59,700	59,700	310,000

Project B 2 - TSETSE ERADICATION

3.6. The presence of tsetse over one fifth of the potential grazing areas and half the watering places in Northern Nigeria is, at present, the greatest single limiting factor to the expansion of the livestock industry. Considerable advances have been made in recent years in the eradication of this fly by the application of insecticides to vegetation where tsetse rest. The six-year plan is designed to increase this effort and by the third year four reclamation units and 2 tsetse survey units will be in operation. An insecticidal testing unit, to provide basic information on methods and persistence of insecticidal applications, together with additional necessary buildings at headquarters, are also included. Total expenditure over the 6 years is as follows:-

4 Reclamation Units @ £10,060 each	£40,240
2 Survey Units @ £4,400 each	8,800
Insecticidal Unit	4,800
Buildings, laboratories and housing	52,300
Supporting staff, insecticides equipment	599,300
	£705,440

Project B 3 - SHEEP IMPROVEMENT

3.7. Most of the Northern Sudan Zone is ideally suited for sheep breeding and mutton production. Investigations into the potentialities of the two local breeds of sheep are already in progress at Katsina Livestock Investigation Centre. This work will continue and be extended to other Provinces. Possibilities are being investigated of increased production by use of imported Merino rams, while prime mutton production will be accelerated by the use of Black headed Persian rams, and by the establishment of pure herds of these sheep. Total costs for the centres at Katsina and Bulassa, including the purchase of necessary stock, are £57,750 for the six-year period.

Project B 4 - GOAT IMPROVEMENT

3.8. The value of the skins of the Red Sokoto Goat both in the export market and to local tanners is well known. Efforts to impnove the breed have so far been limited to Bulassa Livestock Investigation Centre (Birnin Kebbi). This work is to be extended by the establishment of a new breeding centre in Sokoto Province which will contribute to the desired increase in the quantity and quality of skins. The capital cost will be £18,000.

Project B 5 - LABORATORY & INVESTIGATIONAL SERVICES

3.9. The policy of establishing provincial diagnostic laboratories has been in operation for some years. Within the six-year plan the chief developments will be the establishment of a laboratory at RAAV Livestock Improvement Centre to serve the needs of the Muturu - Ndama cattle improvements schemes as well as those of Benue Province. In addition certain essential buildings and equipment are required to complete the main laboratory and teaching centre at Mando Road, Kaduna. The total cost of this project is estimated at £58,500.

Project B 6 - POULTRY IMPROVEMENT

3.10. It is estimated that the poultry population of Northern Nigeria is at least 30 million birds. Poultry production offers the quickest and cheapest method of widespread increase in high protein foods, but the quality of birds and their feeding and care need great improvement. It is proposed that breeding flocks and hatcheries should be concentrated at 3 main centres - Riyom, Kaduna and Ilorin. From these centres day-old chicks will be issued to poultry farmers throughout the region. A laying flock of 600 to 1,000 birds, incubation space for 10,000 eggs and adequate hatching accommodation will be provided at each unit. The total provision of £100,000 during the plan period will be distributed approximately equally between the three centres.

Project B 7 - VETERINARY SCHOOL, KADUNA

3.11. It is proposed that Northern Nigeria, owing to the vital importance of animal production to the region, should undertake full responsibility for training its own staff of Veterinary Assistants. Entrance levels and standard of courses can then be adjusted to the needs of the Region. The present 2-year Veterinary Assistant course at Vom will therefore be transferred to the Veterinary School, Mando Road in October 1962 if possible, or at latest in October 1963. To provide the necessary facilities, certain additions at Mando Road are essential, the most important items being the provision of adequate dormitory accommodation, housing for teaching staff and farm-yard facilities. An administrative block and extra teaching laboratories and museum are also required. Facilities will be provided to accommodate 50-60 students supplying 25-30 trained Veterinary Assistants each year, at a capital cost of £90,000.

Project B 8 - FULANI AMENITIES

3.12. The very large programme, amounting to over £1 million under this project heading has at its aim the improvement of the environment of the Region's cattle by providing amenities for the Fulani herdsmen. Such improvement is essential if the results of improved breeding are to be realised. It is especially necessary to improve conditions during the long dry-season, when range-management must be of such a standard as to provide sufficient forage for controlled numbers of stock. Adequate water supplies must be available and grazing reservations must be demarcated and developed. By far the largest item on the programme (£600,000) provides for demonstrating to the cattle-owners the advantages of supplementary feeding. Certain equipment is also required to control the water made available by the artesian wells programme in Bornu Province.

3.13. This programme will form the basis for the development of a sound animal husbandry and production policy.

Project B 9 - SCHEMES PREPARED BY MINISTRY OF AGRICULTURE

3.14. Responsibility for the four programmes under this project heading, which rested with the Ministry of Agriculture when the draft plan was first drawn up, have been transferred to the Veterinary Division of the Ministry of Animal and Forest Resources.

3.15. Cattle Breeding The number of slaughter cattle entering the trade in Northern Nigeria each year total at least 750,000 head. The fattening of these cattle before slaughter by large scale feeding ranches will be undertaken by the Agricultural Development Corporation. The improvement of the quality of the carcasses by the introduction of exotic breeds will remain the responsibility of this Ministry. For this purpose, at least two cattle breeding ranches of 30,000 - 40,000 acres each will be established. Proved tropical beef breeds such as the Santa Gertrudis breed from Texas and the Sahiwal or Red Sindhi from India, and the Kanama milk breed from Sudan will be introduced. In addition to improvement by breeding, these ranches will afford an opportunity for experiments on range management and fodder conservation on a large scale. The phasing of expenditures will be as follows (in £000):-

Building & Equipment	62/63	63/64	64/65	65/66	66/67	67/68	Totals
1st Centre	72	20	10	-	-	-	102
2nd Centre	-	72	20	10	-	-	102
Purchase of Stock							
1st Centre	24	-	12	-	12	-	48
2nd Centre	-	24	-	12	-	12	48
Totals	96	116	42	22	12	12	300

3.16. Stock to be purchased for each ranch over the six-year period includes a local breeding herd of 700 cows (£31,500), 30 Santa Gertrudis bulls (£9,000) and one pure-breed herd of a bull and 20 heifers (£7,500).

3.17. In addition to the main cattle ranches where the Santa Gertrudis breeds will be used, provision of £40,000 is made for importation of other useful breeds such as Red Sindhi and Kanana breeds. Provision of £100,000 is also made for an additional cattle breeding ranch to serve the needs of the Riverain Provinces, including further work on the Muturu and Ndama cattle breeds.

Project B 10 - ANIMAL INDUSTRIES

3.18. The organisation of cattle fattening ranches, and the improvement of marketing channels, abattoirs and other meat processing plants are no longer the responsibility of the Veterinary Division as these activities are to be undertaken by the Development Corporation. The responsibility for improving cattle routes, railing facilities and organisation of cattle markets must, however, remain, as problems of animal health are involved. Responsibility for experimental tanneries and for the Hides and Skins Improvement service also remain within the Ministry. The tanneries at Sokoto, Maiduguri and Funtua are designed as teaching, experimental and research centres. Expenditure of £297,115 on these services is planned.

CHAPTER 4

Forestry

4.1. The primary object and purpose of Forestry is the production of wood, whether as timber, fuel, or in other forms, as a natural raw material which is essential in the economy of the nation. A secondary object and purpose of Forestry, which, in a country such as Northern Nigeria deriving its main wealth from agricultural and pastoral sources, assumes equal or even greater importance is the preservation of the climatic and water regime of the country. This is especially important to Northern Nigeria where it is true to say that the ultimate limiting factor to industrial development may well be water itself.

4.2. Forest is a re-newable natural resource. The Forest resources of Northern Nigeria have been subjected to adverse influences in the past, and it must be the object of Forest Management to work towards the control and removal of these adverse forces, the reversal of the processes of forest degradation which these forces are bringing about, and the development of forest wealth by the increase of the productivity of the forests and their efficiency in the regulation of the climatic and water regime.

4.3. Forestry can only be developed by increasing the production of the forest estate, either by the improvement of the quality and rate of growth of the natural forest, or, where the natural forest is unproductive or excessively impoverished and can be replaced by quicker growing and more productive artifically established forest, by the establishment of plantations. In the past the activities of the Forestry Division have been restricted through shortage of funds and it has been unable to build up the trained staff with the "know how" in the creation, on a working scale, of plantations. The provision of funds in this Development Plan for Pilot Plantations in the Guinea Zone (Project C.3) and for Pilot Afforestation on the Mambilla Plateau (Project C.7) is therefore of the greatest importance in furthering the development of Forestry.

4.4. When considering the secondary role of the protection of the climatic and water regime of the country it must not be forgotten that forests, whether natural or artificial, are not static entities. A forest is a living population of trees, it is continually reacting to the natural forces which play on it and changing in nature and composition and density in accordance with the effects of those forces, whether natural or human. Unhappily the forces which are acting on the forests of Northern Nigeria (for example uncontrolled burning in savanna forests) are such that the forest is tending towards degradation rather than towards improvement. If these forces are not controlled by the introduction of proper forms of forest management this process of degradation and impoverishment will continue, and the forest resources of the country will be destroyed. The mere legal process of creating a Forest Reserve does not, of itself, guarantee the perpetuation of that forest, and positive action is required in the form of proper scientific management, to arrest and reverse the present process of degradation. The longer the forests are left to the processes of degradation and impoverishment, the greater will be the technical difficulties of reversing the processes and restoring the forests to productivity and efficiency. It is accepted that Northern Nigeria will have to pay for the past neglect of the forest resources by injecting capital into the forest in the form of operations designed to bring about the reversal of the adverse forces before any real increase in the wealth of the forest resources can be brought about.

4.5. Hitherto the activities of the Forestry Division and the Native Authorities Forest Departments has been, of necessity, directed mainly towards the survey and demarcation and constitution of Forest Reserves in order to build up a sound and permanent Forest Estate. In the past the available funds were only sufficient for this process of reservation, and little attention was paid to the active practice of Forestry operations within the already secured forest estate. Total expenditure on such operations and the afforestation of land by the creation of plantations averaged no more than £8,000 per annum for twelve provinces. Consequently little satisfactory progress has been made towards the solution of the many technical problems of forest management and the evolution of techniques for the enrichment and improvement of the productive capacity of the forest in the specific conditions of Northern Nigeria. The result is that, over the greater part of the already constituted forest estate of some 25,000 square miles of Forest Reserves there is little proper management and the processes of degradation continue unchecked. These

25,000 square miles, whilst not considered sufficient to ensure the supply in perpetuity of the wood which Northern Nigeria needs now and in the future, are sufficient to enable a start to be made on the introduction of scientific management and exploitation.

4.6. It is therefore intended to make funds available for investment in the forest estate in the form of improvement and development works. As already stated, in the past the limiting factor has been lack of funds rather than of professional staff. This has been aggravated by the past policy of limiting Government responsibility to the provision of the professional and intermediate technical staff, and assigning responsibility for development of the Forest Reserves to the Native Authorities, who in many cases are either unable or unwilling to provide funds for the long term investment which is characteristic of forestry. The forest resources of Northern Nigeria are much more than a purely local asset. As the only source of wood production within the country, and with their vital role in the conservation of the climatic and water regime of the country, they are essentially national in importance and the Regional Government has now recognised this fact by making funds available for the proper management of forests, thereby increasing productivity and efficiency. Such expenditure is a long term investment for the enrichment of the country as a whole.

4.7. Fortunately those forestry operations which are designed to improve the quality and productivity of the forest also, by their very nature and effect on the forest and soil, improve the degree of regulation of the climatic and water regime which the forests exercise. Improved forest cover brings in its train improved water retention and reduced run-off. This fact alone would justify, in the long run, the proposed expenditure on the improvement of the forest estate, apart from any considerations of increased productivity. The Forestry Development Plan, 1962/68 consists of eight individual projects each of which is complementary in working to bring about the overall object of the plan, which is to increase the value, productivity and usefulness of the forest resources in the economy of Northern Nigeria.

Project C.1 - AMELIORATION OF THE FUEL SHORTAGE IN THE ARID NORTH, SUDAN ZONE.

4.8. This Project is a continuation of a project already started under the 1960/62 Development Plan.

The requirement in the arid areas of the north of Northern Nigeria is to provide fuel supplies in order to prevent, if possible, the present burning of organic matter which should be returned to the farms as manure. At present, such is the extreme shortage of wood fuel in many parts of the extreme north that the local population is driven to use corn stalks, cow dung and other organic refuse as a substitute. The result of this practice is clearly visible in the manifest evils of soil deterioration and reduced farm yields.

4.9. It is planned to establish by 1965 twenty-four irrigated nurseries in which tree seedlings will be raised in large numbers by the polythene pot technique. The seedlings so raised will be distributed:-

(a) for use in the establishment of pilot fuel plantations near the larger centres of consumption;

(b) for the enrichment planting of the impoverished forest reserves and communal forestry areas in the affected districts;

(c) for distribution to Native Authorities for the creation of village woodlots;

(d) for distribution to individuals, schools and other institutions prepared to plant and tend a tree.

In preliminary reconnaissance to determine suitable areas for nursery sites considerable difficulty in obtaining suitable water supplies has been experienced and may become a limiting factor in the development of the project.

4.10. In parallel with the establishment of the irrigated nurseries, twelve pilot plantations for fuel supply will be set up during the period of the plan. Each plantation unit will consist of an annual planting area of 40 acres, not necessarily in one single block, depending on soil and site conditions. The estimated cost is £42 per acre, or £1680 per annum per plantation unit.

Project C.2 - ACCELERATION OF THE PLANNED MANAGEMENT OF FOREST RESERVES.

4.11. Provision has been made to carry out in each Province the species trials, trials of technique for the enrichment of degraded forest, soil and water-table surveys, vegetation surveys and stock mapping required for the preparation of working plans for the management of the forest reserves. These surveys will be carried out by specialist teams working completely independent of the Provincial Forest Officers. There will be two Savanna Investigation Units for the Sudan Zone and for the Guinea Zone, each headed by an Assistant Conservator of Forests working directly under the Conservator of Forests in charge of the Zone in which the Unit is working. These Savanna Investigation Units will examine in detail the forest reserves in an order of priority to be determined in accordance with the results of the preliminary reconnaissance of the Provinces which has already been carried out as part of the 1960/62 portion of the Development Plan. They will be charged with the specific duty of carrying out the surveys which will provide the basis for the preparation of proper management plans. The management plans for the reserves, in order of economic importance, will then be prepared by the Conservator of Forests and Provincial Forest Officers will advise and assist the Native Authority Forest Departments to implement them.

4.12. Each Savanna Investigation Unit will consist of three field teams under the control of an Assistant Conservator of Forests, the three teams working as a single unit. Each Unit will require two Field Sampling Teams making the necessary records of vegetation and soil types and one Gridding Team to lay out the grid lines on which the survey will be based. Each Investigation Unit will have its own transport, and the total cost of each Unit over the period of the Plan is estimated at £24,760.

4.13. In view of the greater importance of the High Forest Reserves and the urgency of arriving at an estimate of the timber potential of Northern Nigeria, it is proposed to have two Timber Resources Survey Units working simultaneously in these Reserves. By this means it is hoped to arrive at a complete survey of the Region's timber resources before the end of the Plan period. The requirements for these Units are basically similar to those of the Savanna Investigation Survey Units, but the actual composition of the Field teams will differ because they will be working in High Forest and not in Savanna and because there will be more emphasis on the enumeration, stock mapping and measurement of standing trees and less on detailed soil mapping. These Units will also have their own transport, and the total cost of each Unit over the period of the Plan is estimated at £23,740.

4.14. It is also intended to establish two pilot mechanical cultivation units, one each for the Sudan Zone and the Guinea Zone, for the preparation of planting sites. It is estimated that the total cost of each unit will be £6,800.

4.15. Species Establishment Trials. Each Provincial Forest Officer, under the direction of the appropriate Conservator of Forests and with the co-operation of the Forest Research Officer, will establish sample plots of exotic and indigenous trees within the constituted forest estate in order to ascertain the suitability and rate of growth of such species in each type locality. In this way it is hoped to introduce to Nigeria exotic species which will provide more rapid growth or more suitable wood for specific purposes (e.g. paper pulp, matchwood, pulpboard, chip board, etc.) than the known indigenous species. The estimated cost in the Plan period is £9,000.

4.16. Purchase of tools and equipment for the Savanna Investigation Units and the Timber Resources Survey Units.

In addition to normal tools for field work specialised equipment will be required by the Savanna Investigation Units and the Timber Resources Survey Units. Provision of £1,250 has been made for this.

Project C.3 - PILOT TIMBER TEAK PLANTATIONS

4.17. While the total timber resources of Northern Nigeria are not yet accurately known and part of Project C.2 is specifically designed to remedy this it is quite clear that the known area of High Forest available falls far short of the area required to supply even the present needs of Northern Nigeria in sawn timber, and Northern Nigeria is faced with a serious shortfall between supply and demand for sawn timber. This shortfall can only be reduced by increasing production from the natural high forest areas. The natural high forest is relatively low-yielding owing to the slow rate of growth of most of the indigenous species and the number of un-utilisable species in the polyspecific tropical forest. Therefore the most practical way to increase the production from these high forest areas is to convert the natural polyspecific, slow growing forest into timber plantations of a known quick-growing species which will yield high quality construction timber.

4.18. Northern Nigeria is fortunate in having, particularly within the Provinces of Ilorin, Niger, Kabba, Benue and Zaria, the conditions of soil and climate which favour the rapid growth of the very valuable commercial timber Teak (Tectona grandis). There is ample evidence in the form of existing trial plots of Teak (e.g. a plot of Teak at Idah 30 years old) to give concrete proof that, given the proper choice of soil and locality, and given proper silvicultural treatment during the life of the crop, Teak of quality comparable to Nilambur Teak Grade II (a very high grading for commercial purposes) can be produced in the period of 40 years.

4.19. Teak is the most valuable timber in the world. The present world price is £4-0-0 per cubic foot as compared with £1-6-6 per cubic foot for Mahogany and Iroko. It is quick growing compared with the indigenous species, and can be grown to sawmill-size within 40 - 50 years as compared with 100 - 150 years for Mahogany and Iroko. When samples of the Idah teak were tested by the Forest Products Laboratory, Princes Risborough it was found to be of excellent quality despite the fact that the plot in which it was grown had been completely neglected for many years, without the regular treatment of thinnings which are essential to realise the highest quality crop. Properly operated, therefore, it would seem that teak plantations can provide a profitable means of reducing the shortfall between supply and demand for sawn timber.

4.20. It is, however, essential that before committing Northern Nigeria to large scale investment, pilot plantations should be created on the minimum economic scale to determine the most efficient means of creating and operating such plantations to obtain experience in handling larger areas of annual planting and to build up a trained staff. The project will consist of two pilot plantations each of 40 acres per annum in each of five provinces. The total estimated cost for the Plan period is £76,000, or £7,600 per plantation. The project is a sound financial investment. The full financial return willnot, of course, be realised until the harvesting of the final crop on maturity of the plantation units, i.e. after 40 - 50 years, but there will be financial returns from the thinnings during the growth of the crop, which produce valuable poles for telegraph poles, transmission poles, etc. Nigeria is at present spending £12 per pole to purchase and import Baltic pine telegraph poles. This project will produce as a by-product better poles at cheaper cost, thus saving foreign exchange.

Project C.4 - ESTABLISHMENT OF AN INDIGENOUSLY OWNED AND OPERATED SAWMILLING INDUSTRY

4.21. Northern Nigeria is deficient in organised machine sawmilling facilities. There are only two modern machine sawmills working in the Region and the country relies on the primitive and wasteful pit-sawing industry for the greater part of its sawn timber supplies. The quality of pit-sawn timber is inferior to the machine-cut product. Irregularity of pit-sawing leads to much waste, and pit-sawn timber has to be planed before it can be used for modern industrial requirements. This re-treatment represents a loss of material and a considerable consumption of manpower and labour which is uneconomic. With the expansion of the building programme there will be an ever increasing demand for the supply of uniformly sawn and graded timber. It is therefore highly desirable that the primitive pit-sawing industry should gradually be replaced by an indigenously-owned and -operated sawmilling industry capable of meeting the demand for higher quality sawn timber.

4.22. The High Forest Areas of Northern Nigeria are capable of supporting a number of small sawmill units consisting each of a simple power driven frame saw as the basic machine unit, to be owned and operated by Northern Nigerians. The aim is to set up a sawmilling industry comparable to the highly successful Chinese industry which operates in Malaya and which has done so much in that country to further industrial development. The type of machine which is used must be within the means of the local investor. To create such an industry it is necessary to provide the technical and mechanical skills and "know how" which are at present lacking. A Specialist sawmill engineer, not necessarily a fully qualified engineer but one who has himself worked with the type of equipment which will be used, will be recruited on contract. His first task will be to review the conditions obtaining in Northern Nigeria, visiting the High Forest areas and existing mills in both the Northern and Western Regions, and to advise on the specific type of equipment best suited to the purpose and local conditions. He will then erect and bring into operation in a suitable locality a suitable mill which will be used to demonstrate to local investors that such a unit can provide a profitable return on investment. He will also train operators for potential investors. Such potential investors (and there have been a number of requests submitted by Northern Nigerians to the Northern Region Development Corporation for loans to set up sawmills) will then be able to see the type of mill most suitable for their purpose, receive exact and expert advice on the type of equipment to purchase, assistance in the erection, operation and maintenance of theirplant and training for their machine operators. When the sawmill engineer has set up and brought into operation the demonstration mill a suitable Northern Nigerian will be recruited as an understudy and to take over from him after a suitable period of training and experience. Running costs should not exceed £300 per month and, after an initial period, sales of timber are expected to make the operation self-supporting.

Project C.5 - IMPROVEMENT OF OFFICE ACCOMMODATION

4.24. This project will provide improved office and store accommodation for Provincial Forest Officers and their staff in those Provinces where present accommodation is unsatisfactory, inadequate or non-existent. The total estimated cost is £13,400.

Project C.6 - DEVELOPMENT OF TOURIST ATTRACTION YANKARI GAME RESERVE

4.25. The Regional Game Unit and the Yankari Game Reserve were set up with the two-fold purpose of preserving the wild life of Northern Nigeria and attracting tourists to a Game Reserve on the lines of the famous national parks in East and South Africa. Much of the initial work of opening up motorable tracks through the Game Reserve and accustoming the wild animals to the presence and movement of motor vehicles has already been carried out. It is planned to improve the access road and the tracks within the reserve to a standard which will enable tourists to use a normal saloon motor car on their expeditions to see the animals. Provision has also been made for the construction and maintenance of a Rest Camp. Initially this will not be of hotel or catering rest house standard but will provide semi-permanent accommodation with sufficient basic furniture and equipment to enable visitors to stay in moderate comfort if they bring their own bedding, food and drink.

Project C.7 - PILOT AFFORESTATION SCHEME MAMBILLA PLATEAU

4.26. The Mambilla Plateau is situated within the area of jurisdiction of the Gashak-Mambilla Native Authority in the new Sardauna Province. It is an extensive area of rolling grasslands having a general elevation of approximately 5000 feet. Being free from tsetse fly, the Plateau carries a heavy stocking of cattle. The area is largely treeless and forestry developments are required to provide a more balanced pattern of land use and rural economy. Fuel and poles are in short supply and at present the natural tree growth is virtually restricted to narrow strips of poor quality fringing forest along the sides of stream courses. There is a pressing need to provide plantations near the main centres of population to meet the growing requirements of the local people for fuel and poles. Furthermore, if the cattle industry is to develop along modern lines there will be need for scientific control of grazing and this will entail fencing of ranges and pastures. For this purpose large quantities of fencing posts will be required which the poor quality natural forest cannot supply. Lands are being set aside as forest reserves available for afforestation near six of the main centres of population in the Mambilla Plateau as shown:

Name of Reserve	Approximate area (acres)
Gembu	90
Nguroje	80
Kakara	100
Dorofi	80
Mai Samari	400
Mayo Daga	100
Total area	850 acres

4.27. The Mambilla Plateau is favourably situated climatically for afforestation work, in that it enjoys as high a rainfall as any other part of Northern Nigeria. A flourishing afforestation scheme employing Eucalyptus species is already in progress in Jos Plateau, where topographical and climatic conditions are similar but the rainfall is less. On the neighbouring Bamenda Highlands Eucalyptus plantations have been very successfully established, and small scale trial plots of Eucalyptus species have already been initiated in four of the forest reserves on Mambilla Plateau (Gembu, Nguroje, Dorofi and Mayo Daga). Small nurseries are already in existence in these reserves and the trial plots show good promise. These nurseries are to be expanded, and two additional nurseries at Mai Samari and Kakara will be started. Each of the six nurseries is designed to produce 10,000 polythene pot seedling plants per annum for a pilot afforestation scheme covering 10 acres of afforestation planting in each of the six forest reserves per annum. Surplus nursery stock will be made available to local farmers to plant in their villages and farmlands, as is extensively practiced on the Bamenda Highlands. Each nursery will be a very simple unit manned by two trained labourers, raising Eucalyptus seedlings in polythene pots by the accepted technique, with hand watering using Dieldrin in the water to minimise the damage to plants by termites. This technique has proved very successful on the Plateau and has raised the establishment efficiency from the order of 65% survival after planting to over 95%. No elaborate equipment is required. Simplicity of design and operation must be the keynote in this operation in an area which is remote and difficult to supervise and where mechanical transport facilities are non-existent.

4.28. Afforestation will commence during the 1963 rains, after a careful preliminary soil survey to determine the most suitable planting sites. With little or no natural forest on the planting sites, the cost of initial site clearing and preparation for planting will be lower than normal, but the low clearing costs will in some measure be offset by the necessity to fence the planted sites to prevent cattle entering the plantings and trampling the young plants. Establishment costs (i.e. the overall cost of clearing, fencing, pitting, planting and weeding) are estimated at £30 per acre. The total estimated cost of the project is £19,100.

Project C.8 - PROPOSED GAME RESERVE BORGU DIVISION

4.29. The Borgu Emirate of Ilorin Province has long been recognised as a very suitable location for a Game Reserve, but action towards the establishment of a Reserve in this locality was deferred until experience could be gained from the earlier Yankari Game Reserve. Development of the Yankari Game Reserve is now sufficiently advanced to justify the creation of other Game Reserves in Northern Nigeria and during the months of January and February 1961 the Regional Game Warden carried out a full reconnaissance of Borgu Division to ascertain the status of game in the area (and the factors affecting its present and future status) and to formulate proposals for the establishment of a second Game Reserve. His reconnaissance report was circulated to the members of the Regional Wild Life Preservation Committee, and at its inaugural meeting on 14th and 15th April 1961, the Committee recorded unanimous support for the proposal that a second Game Reserve should be established in the Borgu Division.

4.30. Borgu Emirate is one of the few remaining areas of Northern Nigeria characterised by extensive tracts of uninhabited woodland supporting a relatively abundant game population. Dry season hunting parties from the neighbouring provinces of Oyo, Sokoto and Niger, however, are causing rapid reduction in the numbers of the game. Unless early action is taken to ensure strong protection it is evident that this "stranger" hunting on a commercial scale will result in the total extermination of the game. The proposed licensing of traders in game meat will go some way towards preventing the excessive destruction of the game population, but a bolder long-term policy of game preservation is urgently required if this valuable heritage is to be preserved and maintained. The only method which will ensure this is the creation of an adequately-patrolled Game Reserve which will provide a sanctuary within which the local fauna can breed undisturbed. It will also, thereby, constitute a permanent reservoir of game for the surrounding areas. Game increasing in numbers within the Reserve will naturally migrate outside and be available for hunting, thus ensuring a continued supply of meat.

4.31. A further advantage of such a Game Reserve will be its potential Tourist attraction, following on the initial resting period during which the game will be allowed to multiply undisturbed by hunting, while basic communications within the Reserve and with the outside world are established. Borgu is within a day's journey of Lagos and some of the main centres of population of the Western Region via excellent all-season motor roads. It is certain that the Niger Dam Project will attract visitors from the Western Region and elsewhere who would appreciate the added attraction of being able to observe wild animals in their natural surroundings.

4.32. The specific area which has been selected as being most suitable is a tract of uninhabited land containing approximately 1900 square miles in central Borgu, bounded roughly on the north by the Bussa - Shagunu - Babana road and on the south by the Kaiama - Gwasero Road. The sequence of operations in establishing the Game Reserve will be:-

(a) Preliminary survey and demarcation of the area to be enclosed as a Game Reserve;

(b) Legal Constitution as a Game and Forest Reserve;

(c) Establishment of a base camp for operations by the Game Warden in charge and his patrol staff;

(d) Recruitment of patrol staff;

(e) Construction of motor tracks through the Game Reserve;

(f) Acclimatisation of the wild animals to the presence and movement of motor vehicles.

The total cost of this project for the period of the Plan is estimated at £26,000.

CHAPTER 5

Trade and Industry

5.1. Plans for the development of industry in Northern Nigeria are based primarily on the processing of local Primary products. Of secondary, though distinct importance will be a number of industries based on imported raw materials making products destined for the Northern markets which are naturally protected by high freight rates from the coast. Some industries based on imported raw materials and sited in the North for climatic reasons, will also serve the whole Federation.

5.2. It is Government's intention to train Northerners for industrial management positions and, likewise to enable Northerners to gain experience as directors so that they are ultimately able to run industrial Boards in satisfactory relationship with hired non-participating managements. It is considered that some members of a fully efficient industrial company Board should have both industrial management experience and a financial interest through capital participation. This pattern of management is most suited to the free-enterprise industrial economy encouraging overseas investment, which it is Government's policy to promote.

5.3. Every effort will be made to encourage local entrepreneurs to undertake increasingly large industrial projects. To this end an agreement has been entered into with the Agency for International Development of the United States of America (formerly known as the International Co-operation Administration) for the establishment of an Industrial Development Centre which will provide training in commercial and industrial techniques to private business men together with credit for the purchase modern equipment.

5.4. Whilst wholly foreign owned overseas enterprises are in most cases welcomed, the Government recognises that local participation in industrial projects is eagerly sought by many of the overseas managements which it most wishes to attract. Partnerships with overseas investors are particularly welcomed because of the opportunities they offer for Northerners to gain management and Board experience, and for the security they offer that a genuine effort will be made to train Northerners for high management positions.

5.5. Every effort will be made to encourage local business men to invest in industry, but because of the scarcity of local private capital for industry, government-sponsored industrial development agencies have a vital part to play. For this purpose Government's chief instrument will be the reorganised Industrial Development Corporation in association with the Development Bank (vide Chapter 6), though such organisations as Northern Development (Nigeria) Ltd. will have an important complementary role. All provision for Government participation in industry has therefore been made under the Development Corporation section of the Plan.

5.6. The following are the industries to which priority has been assigned, showing the total new investment likely to be required within the period, together with the contribution likely to be required from Government sponsored sources.

Industry	New Investment 1962/68	Government Investment 1962/68
Textiles C.P.G.	£9,000,000	£1,500,000
Other Cotton goods	1,400,000	300,000
Tanning	1,000,000	200,000
Cement	5,000,000	1,000,000
Iron & Steel	29,000,000	1,000,000
Fibre (Sacks)	2,400,000	800,000
Oilseed Crushing	3,000,000	600,000
Starch	50,000	10,000
Paper	3,000,000	600,000
Abattoirs	400,000	80,000
Oil Refinery	12,000,000	1,000,000
Miscellaneous	5,000,000	1,000,000
TOTAL	£71,250,000	£7,550,000

Investment in the undermentioned projects may be required before commencement of the Plan

Sugar	£3,750,000	£385,000 (NRDC & NDNL)
Hotel	800,000	800,000
Matches	250,000	-
TOTAL	£4,800,000	£1,185,000

Total Government Investment £8,735,000

The proportion of the principal locally produced commodities which will be processed is shown in the following table:

1962

Product	Produced	Processed	%
Cotton (Bales)	300,000	22,500	7%
Groundnuts (tons)	600,000	150,000	25%
Cottonseed (tons)	30,000	-	-
Soyabeans (tons)	13,000	-	-
Hides (tons)	700,000	30,000	4%
Skins (cwt)	60,000	7,000	11%
Benniseed (tons)	27,000	-	-

1968

Product	Estimated Production	Processed	%	% of 1962 Production
Cotton (Bales)	600,000	123,000	20%	40%
Groudnuts (tons)	950,000	400,000	42%	66%
Cottonseed (tons)	140,000	100,000	70%	145%
Soyabeans (tons)	27,000	10,000	40%	77%
Hides (units)	700,000	450,000	64%	64%
Skins (cwt)	60,000	30,000	50%	50%
Benniseed (tons)	29,000	10,000	34%	37%

5.7. Increases in the proportion of produce processed will not necessarily entail a reduction in exports, even when the processed product is locally consumed. For instance, even with the estimated increase in the quantity of cotton lint made into textiles, by a factor of nearly six, entailing an increase in the proportion of the crop processed from 7% to 20%, the increase in cotton production which is confidently predicted would ensure that there would still be a greatly increased sale of cotton lint overseas.

5.8. The implications of industrial expansion for Government's responsibilities in the provision of services are appreciated. Sixty million pounds worth of industrial investment requiring a Government sponsored investment of six and a half million pounds may well require a Government supply of twelve million gallons of water a day (excluding the requirements of a steel industry), four million pounds investment in executive housing, and a million pounds investment in the preparation of industrial sites.

5.9. Industrial areas with full services, similar to those in Kano, Zaria, Kaduna and Jos, will be established. In choosing these, a balance will be struck between the desire of industrial managements to go where the fullest services already exist and the desire of Government to pursue a policy of dispersing industry to areas so far without it. Appropriate concessions will be considered for special areas. Sites now under consideration or construction are at Gombe, Gusau, Ilorin, Maiduguri, Makurdi and Sokoto.

5.10. The Ministry of Trade and Industry will do everything possible to attract experienced management of the right quality and will retain the services of overseas experts for this purpose where necessary. It also plans to co-ordinate a large expansion of training facilities for artisans, clerical and management staff for industry, in conjunction with the Ministry of Education, the Development Corporation, and commercial managements.

5.11. In the field of commerce Government intends to encourage the Region's own businessmen to take a rapidly increasing share in the Region's trade, by offering them greatly increased training facilities and an expanded advisory service. In particular advice and assistance in accounting and office management, the development of locally owned businesses, especially those concerned with transport, by association into larger and more viable units, and increased use of banking facilities will be encouraged. Increased facilities for prompt action on trade complaints will be provided.

Project D.1 - INDUSTRIAL SURVEYS AND CONSULTANTS' FEES

5.12. This project covers the cost of feasibility surveys for specific industries and fees of consultants employed in connection with such surveys.

Project D.2 - OFFICES

5.13. The Ministry of Trade and Industry intends to set up branch offices in places where considerable development is likely to take place and where it is desirable to have a resident member of the Ministry staff to serve as a close link with commercial and industrial interests.

Project D.3 - VEHICLES

5.14. Provision is made for the purchase of six Land Rovers to serve the needs of the branch offices, for the use of survey teams, visiting industrialists and Ministry staff.

Project D.4 - INDUSTRIAL DEVELOPMENT CENTRE

5.15. The provision of £134,000 covers the Regional Government's contribution to the costs of this project. The United States Government, through A.I.D., is contributing the balance of £1,320,000

CHAPTER 6

Development Corporations

6.1. In the past Government's main agency in the Development of business enterprises has been the Northern Region Development Corporation. Financed by grants from the Marketing Board the Corporation has initiated enterprises ranging from a £1,500,000 textile factory to a small oilseed processing factory, as well as numerous light industries in the Kano area. Its activities have embraced agricultural development schemes including large scale rice cultivation, land settlement schemes and mixed farming loans. It has further financed and undertaken road construction and entered into the road transport business. Small businessmen have been helped with loans at favourable rates of interest. The activities of the Corporation have been widely spread over the commercial, industrial and agricultural fields, and with the limited resources available a good deal has been achieved in generating enterprises in this vast area. Much has been learnt by experience during the past years, the main lesson being that commercial enterprises to become viable and to attract private capital from outside sources must be freed from too close Governmental control.

6.2. In the six-year Plan period Government proposes to expand and intensify its efforts in the private sector. Priorities within the sector remain the same as those for the overall plan. A total investment of some £32.6 million is envisaged and by comparison with the total already invested by the N.R.D.C., it is clear that an expanded and more specialised organisation is required to achieve this level of investment. It is intended to establish three new Corporations for Industry, Agriculture and Housing. These will take over the existing schemes and assets of the Development Corporation and suitable projects previously administered by Ministries will be transferred to the appropriate new institutions. They will be run on commercial lines and non-viable projects will be liquidated, or, where their retention is considered desirable for research or experiment, transferred to the Ministry concerned. The Corporations will be associated with a finance agency or Development Bank, which will draw its initial capital from the Marketing Board.

6.3. The responsibilities of the Corporations are indicated by their titles. The Industrial Development Corporation will be the Government's agent for direct action in the industrial field, preparing schemes and executing them by itself or in co-operation with a technical partner. The Corporation will operate in the manner of a commercial company and will conduct its activities on a profit-making basis. As a minimum overhead and operating costs plus loan repayments to the Development Bank on any sums borrowed must be recovered: the aim will be to produce additional revenue for further development. It will revolve its funds by placing on the market shares in its projects for purchase by indigenous investors as and when demand arises. For new projects it will seek finance from the Development Bank and from other sources, the proportion of equity or loan capital provided by investors other than the Corporation varying in each individual project according to the circumstances of the case. The Corporation will maintain a high standard of investigation and analysis of projects before submission to the Bank to ensure their profitability.

6.4. The Agricultural Development Corporation will operate in much the same way, but will undertake the commercial side of the activities of the Ministries of Agriculture and Animal and Forest Resources. The Ministries will continue their present work of extension, disease control and research, and will bear the initial cost of investigation of projects, leaving the Corporation to deal with the resulting commercial activity. The Corporation will undertake on a commercial basis such items as the supply of seed, fertiliser and feeding stuffs and loans for mixed farming. It will also seek to establish estate agriculture and ranching and promote organisations for improved marketing including packing of farm products, such as eggs and poultry.

6.5. The Native Authority Housing Corporation under a new name is to be expanded to embrace the provision of houses for all needs. It will build houses for leasing or for selling on mortgage terms as well as lending money to individuals to build their own houses under supervision. Into it will be merged the Government Staff Housing Loans scheme, and the possibility of transferring ownership of the existing Government staff quarters in certain areas to the Corporation for letting on economic terms to Government staff will be explored.

6.6. The Development Bank will be Government's official finance agency for Development projects. It will, however, be an autonomous institution free from Governmental control, and be expected to operate with complete commercial independence. It will not be confined to investing only in the new Corporations but in its discretion may invest in other projects submitted by individuals or institutions. It will, however, constitute the main source of finance for the Corporations, but their projects will receive the same detailed appraisal from the Bank Staff as any other. It is intended that the Bank's structure and organisation will be of a standard which will generate confidence in outside investors and in particular international institutions such as the International Bank for Reconstruction and Development and its associates. In principle, its organisation will follow that of the model of other similar institutions such as the successful Industrial Development Bank of Turkey, but it will be tailored to meet the special circumstances of Northern Nigeria. Assistance in establishing the Bank and the Corporations, in preparing the charter, enabling laws and their organisation, and in providing management, is being sought from the International Bank. In the first years of its operation technical staff for appraisal studies as well as training will also be sought from this and other sources.

6.7. The initial capital of the Bank will be provided from the existing reserves of the Northern Nigeria Marketing Board. It is proposed to mobilise the larger part of these for investment in the Bank, leaving the Marketing Board with just over £6,000,000 for working capital. This entails relieving the Board of its liability for subsidising the producer price of crops in lean years, and fixing producer prices annually at such a level in relation to world prices as to anticipate a surplus on the year's operations to cover operating costs. The Marketing Board will inevitably look increasingly to Nigerian sources to provide the short-term credit required to finance crop purchases and movement. Loan repayments from the Federal and Regional Governments will form part of the financing of the Bank. By these means a total of £17.7m. can be made available to the Bank over the six years. This sum should be sufficient to attract outside investment not only to the Bank itself, but also to individual projects sponsored by the Corporations, to the amount of the £14.9 million needed to fulfill the objectives set in the Plan.

6.8. Negotiations with the Colonial Development Corporation will be held to decide the place of

Northern Developments (Nigeria) Ltd. in this structure. It is possible that the C.D.C. may welcome participation in a commercially operated institution such as the Development Bank and may be prepared to associate the N.D.N.L. in some way with the Bank, thereby adding a further £1,250,000 to its assets.

Project E.1 - POULTRY PRODUCTION - CREDIT FACILITIES

6.9. This is an extension of the Veterinary Division's programme for Poultry. Farmers will require credit facilities for their initial outlay on laying stock and equipment and for feeding during the first few months until the venture begins to show a return.

Project E.2 - KADUNA MEAT MARKETING CENTRE

6.10. This project provides for the financing and management of a model meat processing and marketing centre at Kaduna, which is an important part of the Region's livestock programme. Being situated near the Mando Road Veterinary School it will also provide demonstration facilities. The modern abattoir and chilling plant will supply not only the demand of the Kaduna meat trade but also Zaria; and surpluses will be exported by rail to the south. A demonstration retail shop where meat can be dressed and displayed at controlled prices and where improved standard of management and hygiene can be observed will stimulate and modernise the retail meat trade. The Kaduna cattle market will be reorganised as a pilot project in which the advantages of the sale of animals by weight and grade will be demonstrated. A small isolated pig-slaughtering unit is to be established to cater to growing demands in metropolitan centres and in the south. The cattle and sheep fattening ranches are important adjuncts to the demonstration abattoir.

Project E.3 - PROVINCIAL ABATTOIRS

6.11. This programme will provide financial assistance to Native Authorities in Jos, Ilorin and Katsina and elsewhere to construct modern abattoirs.

Project E.4 - MEAT CHILLING PLANTS

6.12. Under this programme supervised financial assistance will be available to Native Authorities to construct model meat chilling plants at Maiduguri, Nguru, Jos and Sokoto. Chilling rooms attached to modern abattoirs will have two main functions. They will enable the abattoir to be used throughout the day instead of for only a few hours in each morning, meat being killed and hung in the cold room until the next day. Also, use of a chilling room improves the prospects for the development of a meat export trade by rail or air.

Project E.5 - CATTLE FEEDING RANCHES

6.13. More than three-quarters of a million head of cattle enter the cattle trade each year in Northern Nigeria; about half are destined for the South and half are slaughtered within the Region. Not more than 50 per cent of these animals are in a finished condition at the time of slaughter, the others being either too thin or immature. Improvement in the quality of trade stock offered for sale is possible, as a long term project, by encouraging cattle owners to fatten stock on their own farms. But for immediate large scale improvement, state investment and management will be necessary in the initial years. This is to be effected by the establishment of four fattening ranches at well chosen sites, each capable of dealing with 8,000 to 10,000 head per annum. Apart from improvement in quality of trade cattle, it will be possible to even out supplies of slaughter stock during the dry season when supplies are presently lowest. The ranches will also offer an opportunity to explore various marketing systems without disruption of the present traditional system.

Project E.6 - WHEAT MECHANISATION

6.14. Wheat has been grown in small plots for many years in the extreme North of the Region. Experiments should continue, in the search for higher yielding varieties with good flour milling qualities in order to provide at least part of the flour needed for newly established Nigerian flour mills. It is the declared policy of Government to expand the cultivation of wheat in suitable areas in order to raise production to 24,000 tons per year and to achieve this target over 50,000 acres of land will be needed. Some provision for wheat is included in the Ministry of Agriculture's plan under Water Resources and Irrigation. The additional £300,000 of this programme will cover loans to encourage the use of mechanical aids to wheat cultivation.

Project E.7 - FERTILISER DISTRIBUTION

6.15. To achieve the planned increases in agricultural production the use of fertiliser must be greatly expanded. In order to obtain a 20% increase in groundnut production over the period 1962/68 at least 70% of the crop must receive a dressing of Superphosphate fertiliser. Soya beans and cereal food crops must also receive superphosphate if yields are to be increased. Increased production of rice and yams depends on the use of Sulphate of Ammonia. Due primarily to low consumption, present commercial prices for fertilisers are higher than the increased yields from their use economically justify. With a substantial increase in quantities used, prices will fall to economic levels. The subsidy is a temporary expedient to build demand to the point where prices will fall, enabling the subsidy to be greatly reduced and eventually abandoned. Superphosphate and Sulphate of Ammonia will initially be subsidised at the rates of £16.10s. a ton and £15.14s. per ton respectively.

6.16. It is possible to double cotton yields by the use of fertilisers and insecticidal sprays and at the same time to benefit from a higher quality product. Cotton production should reach a total of 280,000 tons per year by 1967/68 if half the crop is fertilised and sprayed in accordance with recommendations of the Research Institute at Samaru. The temporary subsidies embodied in this plan will have similar results in both increasing production and reducing the unit cost of chemicals required, leading to the reduction and eventual disappearance of the subsidy. Fertiliser for cotton would initially be subsidised at the same rate as for groundnuts, i.e. £16.10s. per ton for superphosphates and £15.14s. per ton for Sulphate of Ammonia. Insecticide would receive a 5% subsidy at £2 per acre, and sprays which cost 10/- and have a life of one year would attract a 100% grant. This programme is to be synchronised with a series of fertiliser and spraying demonstrations carried out by the Ministry of Agriculture throughout the cotton growing areas.

Project E.8 - LAKE CHAD FISHERIES

6.17. The Ministry of Agriculture provides in its Lake Chad Fisheries Programme for equipment, housing, research and demonstrations. Expansion of the fisheries will be dependent largely on the availability of credit to enable fishermen to enjoy the benefits of the demonstrated new techniques and equipment. Equipment loans, under careful supervision, will be available for 2,000 boats at £150 each and 2,000 sets of equipment at £100 each.

Project E.9 - RIVER FISHING

6.18. As in the Lake Chad Fisheries project it will be necessary to supplement the Ministry of Agriculture's plan by the provision of credit facilities for equipment. The provision will cover 1,000 loans of £100 each.

Project E.10 - ESTABLISHMENT OF TREE CROP PLANTATIONS

6.19. In addition to developing production from small peasant holdings a future exists for large scale tree crop plantations. By virtue of their size and organisation such units are more economic and are more easily capable of providing a high quality product. Four such units are planned as follows:-

(a) 5,000 acre mixed Tree Crop Plantation (predominantly Kola)

This project, which will be sited in the riverain area, will utilise coffee and cocoa as relatively short term catch crops interplanted with kola and oil palms on the marginal land within the plantation to obtain the maximum production of tree crop products from the land in question. Methods of cropping have already been proved by trials. The total capital cost of this project, including management, supervisory staff, and operation for the first three years during which there will be no return, is estimated at £356,000. This should be fully covered in the first seven years of operation, and by the tenth year, when all crops will be in full bearing, an annual return of £282,500 is forecast.

(b) 5,000 acre Arabica Coffee Plantation: Mambilla

This project to be sited in an area already proven for the production of arabica coffee will mark the beginning of large scale development of the area. The estimated capital cost, including management, supervisory staff, fertilisers and maintenance for the first four years is £466,000. The return after four years when the trees will be in full bearing is estimated at 30 lbs per acre at 1/- per lb. or £75,000 per annum.

(c) 5,000 acre Citrus Plantation

This project is to be sited in an area suitable for citrus with the object of providing fruit, squashes and canned products both for home consumption and possible export. There is a large demand for citrus products in the North. The estimated capital cost, including management, supervisory staff, fertilisers and maintenance for the first five years is £619,500. The return after six years is estimated at £1 per acre or £350,000 per annum.

(d) 5,000 acre Cashew Plantation

This project, also sited in the riverain area, will provide valuable high protein food for home and possibly overseas utilisation. The estimated capital cost including management, supervisory staff, fertilisers and maintenance for the first five years is £320,000. The trees will be in full bearing after seven years.

The total estimated capital expenditure on tree crop development during the period of the plan is therefore £1,762,000 and annual returns from plantations in full bearing are expected to be in excess of three-quarters of a million pounds, based on current crop prices.

Project E.11 - CORN STORAGE FACILITIES

6.20. This project will provide storage accommodation for the Regional Grain Reserve, as required by law, at an estimated cost of £100,000.

Project E.12 - GRAIN RESERVE PURCHASE

6.21. It is the policy of the Government to maintain an adequate strategic grain reserve against emergencies. It is essential that purchases should be made annually to ensure that the grain of good quality is available when needed.

Project E.13 - LOANS TO MIXED FARMERS

6.22. The expansion of the present highly successful programmes for the establishment of mixed farmers is limited by lack of loan capital. Such capital is to be provided for the establishment of 5,000 farmers per annum at £60 per farmer. Over the six years this will involve £1,800,000 at the rate of £300,000 each year. Repayment of loans is scheduled at £15 after the first year, £15 after the second year, and £30 after the third year for each loan. If all loans are subscribed, £1,125,000 of the total amount will be repaid within the six-year period, the balance extending into the next period.

Project E.14 - ASSISTANCE TO MECHANICAL CULTIVATION

6.23. As a further aid to the mechanisation programme included in the Ministry of Agriculture plan, loans for tractors and implements will be made available to farmers or groups of farmers in selected areas, with special emphasis on settlement or Co-operative schemes in areas where land is comparatively plentiful. The aim is to provide 100 tractors by 1968 at a cost of £150,000.

Project E.15 - HOUSING ESTATES and

Project E.16 - RESIDENTIAL QUARTERS

6.24. See under Chapter 13 on Housing.

Project E.17 - CO-OPERATIVE BANK

6.25. The encouragement of the growth of co-operative societies is established Government policy. In recent years Government has guaranteed the bank overdrafts which provide funds for the societies' activities. It is now proposed to establish a Co-operative Bank to provide these credit facilities. This will provide closer control of the financial affairs of co-operative societies and assist in placing them on a sound footing, at the same time relieving Government of a very heavy liability.

Project E.18 - GOVERNMENT INVESTMENT IN INDUSTRIAL FIRMS

6.26. The sum of £8,735,000 is earmarked as a fund for industrial investment by the Corporation, in conjunction with private capital. The enterprises under consideration include, among others, textiles, tanning, oil-seed crushing, paper manufacture, and food processing, together with ancillary industries. The Corporation's share of investment will, of course, vary according to the needs of each case.

Project E.19 - INDUSTRIAL AREAS

6.27. The preparation of industrial sites, including the furnishing of amenities such as roads, railway sidings and drainage systems, will be necessary to attract industrial enterprises. £1,000,000 has been earmarked for this purpose.

Project E.20 - ELECTRICITY

6.28. The supply of electricity throughout the Federation is the responsibility of the Electricity Corporation of Nigeria. Installation of supplies at major towns where there is a reasonable possibility of profitable operation, is undertaken by the Corporation from its own resources. Ilorin and Offa are recent examples of such supplies, and work is now proceeding on the electrification of Nguru and Oturkpo on the same basis. A successful experiment in rural electrification, using a simple installation suitable for small towns and villages with a compact population of 5,000- 10,000, has also been undertaken by the Corporation at Bici in Kano Province and two more such supplies will be installed in the Region in the near future.

6.29. For towns where the viability of the scheme is marginal, and an electricity supply is required for amenity purposes, the Government of Northern Nigeria has co-operated with the Electricity Corporation by providing interest free loans for the capital cost of the installation while the Corporation has undertaken to bear any losses made in the running of it. Over the period 1960-62, installations have already been provided at Gusau, Funtua, Bida, Bauchi, Makurdi, Lokoja and Minna on this basis at a total cost of £610,000. The Electricity Corporation is anxious to continue this programme in the new planning period and Government plans to provide, through the Development Corporation, £1½ million for loans for further amenity supplies. At present-day prices this would provide 15 to 20 new supplies. Okene, Potiskum and Idah have been approved for next priority after the existing programme, and a further priority list is under consideration at the time of writing.

Project E.21 - GREATER KANO TOWN PLAN

6.30. Kano, Northern Nigeria's greatest city with a population at the 1952 census of over 127,000, is expanding rapidly, and its basic services - roads, housing, drainage and water - are already inadequate.

A Greater Kano Town Planning Authority is to be set up to provide the modern services required for present needs and future industrial and commercial expansion. This Authority will derive its resources from rents and fees which at present accrue to Government, and from grants-in-aid from the various local government bodies covered by the area of the Plan. Initially, however, they will have to meet very heavy capital expenditure for which assistance must be sought. A sum of £3,000,000 over the six-year period has been provisionally inserted in the Development Corporation Plan for this purpose. This will probably take the form of a long-term loan at a low rate of interest, for which overseas aid may be forthcoming.

SECTION B

BASIC SERVICES CONTRIBUTING TO ECONOMIC EXPANSION

CHAPTER 7

Education

7.1. The plan is designed to advance the primary school system towards the ultimate aim of Universal Primary Education as soon as possible, while at the same time providing for an increase of post-primary facilities in order to ensure a balanced system of education.

Project F.1 - ADMINISTRATION AND INSPECTION

7.2. The rapid growth of schools at all levels requires a revised system of administration and inspection. It is proposed to separate administrative and inspectorial duties at provincial level by appointing a Provincial Inspector and a Provincial Education Secretary in each Province in place of the existing Provincial Education Officer. A group of subject Inspectors will be responsible for inspection of post-primary institutions. The capital expenditure on Administration and Inspection is to cover the cost of office and house accommodation for the increased numbers necessary under this re-organisation.

Project F.2 - UNIVERSITY

7.3. The development of the University is a long-term project the details of which have yet to be worked out. The figure inserted in the Development Plan is a minimum figure. It is confidently expected that external aid will provide much of the finance for this project.

Project F.3 - ADVANCED TRAINING COLLEGE

7.4. The college will provide a three year course for 150 post-secondary students a year and will produce teachers for the greatly expanding number of secondary schools in Northern Nigeria. It is to receive considerable external aid in the form of UNESCO staff, who will train Nigerian counterparts.

Project F.4 - TEACHER TRAINING COLLEGES

7.5. Some 25,000 teachers must be trained by 1970 to provide staff for the expanding primary schools. In a seven-class school the staff should consist of two

Grade II teachers, three Grade III and two others; in some Provinces this staffing may not be possible until after 1968 but after this date the position should improve rapidly as 7,000 teachers a year are turned out by the training colleges. By 1970 there should be about 35,000 students in Training Colleges, Government and Voluntary Agency. A standard five-year course of training is being introduced and will supersede the various courses at present in existence. It is expected that about half of each intake will leave at the end of three years as Grade III teachers while the remainder will continue for the fourth and fifth years to qualify as Grade II teachers. Eventually it is hoped that more and more secondary school leavers will go for Grade II training until this becomes the normal type of Grade II teacher.

7.6. Training Colleges will, as far as possible, be planned to develop eventually into either two-stream Colleges of ten classes and 300 students or into four-stream Colleges of twenty classes and 600 students. It is also expected that future men's Colleges will be situated in large towns where dormitories will not have to be provided, since the necessity to provide boarding facilities adds greatly to capital costs. Every college will, however, have a dining hall where one meal will be provided daily for all students and which will also be available as an assembly hall and examination room.

7.7. Rural Education Colleges will continue to give specialist training to selected teachers.

Project F.5 - SECONDARY SCHOOLS

7.8. Primary School leavers are expected to increase from 14,000 in 1961 to 85,000 in 1970. It is hoped to provide at least 10% of these leavers with secondary places, so that the intake must rise from 2,000 in 1962 to at least 8,500 in 1971, involving an additional 200 streams. In order to reach this target it is intended to open as many day schools (or day streams at existing schools) as possible with the aim of achieving maximum economy by the elimination of the heavy capital cost of providing boarding facilities. Schools are now in the process of changing over from a six-year to a five year course: this will effect further economies in buildings and staff.

7.9. It is intended that about one quarter of the secondary leavers should reach Higher School Certificate standard and three fifths of the Higher School Certificate leavers should proceed to the University.

Project F.6 - PRIMARY EDUCATION

7.10. The intention of the Development Plan for primary education is that by January, 1970 at least 28% of the 6-7 year old age-group in each Province shall be in Class I, and that as soon as possible every child entering Class I shall have the opportunity of going on to Class VII. Individual plans have been worked out for each Province and these indicate that by 1970 the primary school enrolment will have risen from the present 300,000 to more than 800,000. It also appears likely that in most Provinces children entering Class I in 1964 and succeeding years will be able to remain at school through to class VII to complete the course.

7.11. In those Provinces where more than 28% of the 6-7 year old age-group is already in Class I there is nevertheless a great deal of work to be done in building up the Senior Primary classes and improving the quality of staffing. Every Province, whatever its present position will have a full primary school programme until at least 1970.

7.12. The Technical Education Plan aims at a comprehensive system of technical education to produce the various categories of technicians of different kinds needed in the North.

Project F.7 - THE POLYTECHNIC

7.13. This is planned as a post-secondary institution for 1,250 students and will offer a wide range of subjects for professional qualifications (in pharmacy, surveying, engineering, etc.) as well as courses for general examinations such as G.C.E. (Advanced Level). In addition to the full-time day classes it is hoped to provide facilities for evening classes.

Project F.8 - OTHER TECHNICAL EDUCATION

7.14. (a) Craft Schools. Thirteen Craft Schools are planned. Each of these will have a three-stream intake for a three-year course, i.e. 270 boys will be in each school at this level. Each school will also have one fourth-year and one fifth-year class, at the end of which pupils will take G.C.E. at Ordinary level in mainly technical subjects.

(b) Technical Training Schools. Three of these schools will give a three-year course leading to City and Guilds Certificates in a wide variety of trades. Each school will take about one hundred boys each year from the output of the three-year courses at Craft Schools.

(c) Secondary Commercial Schools. Pupils who have completed three years at Craft Schools will be eligible for entry to the two proposed Secondary Commercial Schools, each of which will accept 150 students a year for a two-year course leading probably to the Royal Society of Arts Stage II examinations in commercial subjects.

CHAPTER 8

Communications

8.1. The road development plan envisages the expenditure of an average of £4 m. per annum throughout the six years. The total estimated cost is approximately £24.3 million of which £17.8 million will be expended on new projects whilst an additional £3.5 million will be devoted to projects commenced in the final years of the 1960/62 extension of the last development programme, including £2 million for a bridge across the Kaduna River at Wuya, near Bida. A total of about 2,600 miles of roads will be involved. Such important links as Keffi - Abuja - Bida, Bida - Bokani, Kontagora - Zuru - Zamfara, Pategi - Egbe, Gubi - Bunga, Kaduna - Kachia - Keffi will be tarred (a total of over 700 miles). The building of the Bridges over the Kaduna at Wuya and the Gongola at Hinna will ensure constant access to areas which could formerly only be approached by long detours at certain times of the year.

8.2. Much emphasis has been placed on providing a feeder network of roads to the Bornu Railway extension and these have been given high priority. The Gongola bridge and the Biu - Hinna - Gombe road are among these projects. It is proposed that roads should be constructed, reconstructed or improved to take heavy traffic from Damaturu via Biu to Little Gombi, from Maiduguri to Lake Chad via Mongonu, with a spur road from Kukawa north to the frontier, from Potiskum to Gabai via Damshi, from Damboa to Ngamdu via Goniri, from Gubia to Maiduguri, and from Lantewa to Damaturu. In Bauchi Province, the Bauchi - Dass - Tafawa Balewa - Pankshin road will serve a similar function, as will also the Mansur - Pindiga - Kumo link. The road from Gubi via Bunga north to Trunk Road A.21 presently under construction will be tarred. In Bauchi and Adamawa, it is proposed that a road should be constructed from Biliri south to Filiya and Karim Lamido. Garkida and Askira will also be connected. A whole new area will thus be opened up and its economy given impetus by these feeder roads. External assistance is being sought for these feeder roads, which total some 900 miles.

8.3. High priority is also accorded to another road which will prove of great economic significance; that from Lokoja to Jamata, Koton Karifi, Abaji, Toto and thence to Keffi. The important iron ore deposits around Agbaja and the equally important limestone at Jakura will be linked by this road with the Niger, giving easy access to river transport to centres of the steel and cement industries.

Project G.1 - PERSONAL EMOLUMENTS

8.4. This project covers the salaries and other costs of staff employed exclusively on road construction work.

Project G.2 - CARRY-OVER OF 1960/62 DEVELOPMENT PLAN

8.5. The following road projects already started will be completed after the beginning of the Plan period:-

Azare - Shira Road
Bunga - Ningi - A.21 Road
Gashua - Nguru Road
Pategi - Egbe Road
Kano - Gumel - Hadejia Road
Katsina - Daura Road
Zuru - Zamfara Road
Zungeru - Minna Road
Zungeru - Bida Road
Kaura Namoda - Jibiya Road
Argungu - Birnin Kebbi Road
Birnin Kebbi - Jega Road
Jebba - Bacita Sugar Project Road
Wuya Bridge

This project also includes provision for the necessary preliminary investigations and surveys, consultants' fees and quarters for road construction survey teams. The total cost is estimated at £3,506,215.

Project G.3 - NEW ROAD PROJECTS

8.6. The following road projects are covered by this item:

Priority	Province	Project	Mileage	Order of cost
1	BORNU	Biu-Hinna-Gombe (including Gongola Bridge)	80	793,000
2	"	Damaturu-Biu-Little Gombi	138	841,800
3	"	Maiduguri-Mongonu; Mongonu-Baga (Lake Chad); Kukawa-Bosso (Frontier)	174	1,592,100

4	"	Potiskum-Damchi-Gabai	68	414,800
5	"	Damboa-Goniri-Ngamadu	62	378,200
6	"	Lantewa-Damaturu	36	262,300
7	"	Gubio-Maiduguri	60	549.000
8	ADAMAWA	Biliri-Filiya-Karim-Lamindo-Lau	70	561,200
9	"	Garkida-Askira	38	185,440
10	BAUCHI	Bauchi-Daso-Boi-Tafawa Balewa-Pankshin	97	488,000
11	"	Mansur-Futuk-Pindiga-Kumo	60	292,800
12	"	Gubi-Bunga-Ningi-A.21 (tarring only)	82	125,050
13	ILORIN	Kosubosu-Ilesha	50	244,000
14	KABBA	Lokoja-Jamata-Koton Karfi-Abaji-Keffi	130	951,600
15	BAUCHI	Misau-Azare	34	128,100
16	KABBA	Idoani-Kakumo-Northern Region/Western Region Boundary	3½	6,710
17	NIGER	Bokani-Bida (tarring)	68	91,500
18	BENUE	Keffi-Karu-Abuja-Badeggi (tarring)	140	231,800
19	ZARIA	Kaduna-Kachia-Keffi (tarring)	172	213,500
20	ILORIN	Pategi-Egbe (tarring only)	50	61,000
21	KABBA	Idah-Ayangba (tarring)	60	73,200
22	"	Kabba-Omua (tarring)	21	27,450
23	NIGER	Kontagora-Zuru-Zamfara (tarring)	125	152,500
24	KANO	Kunya-Babura-Frontier	53	387,960
25	SOKOTO	Kaura Namoda-Sabon Birnin-Sokoto	180	1,317,600
26	"	Argungu-Bwi-Kaingiwa-Kamba	105	960,750
27	"	Kamba-Bunza-Kalgo	60	439,200
28	ZARIA	Funtua-Dandume-Mando	90	823,500
29	"	Makarfi-Ikara-Dutsin Wai	57	305,000
30	PLATEAU	Shendam-Lafia	75	488,000
31	"	Yelwa-Ibi (including ferry)	45	338,550
32	NIGER	Agaie-Baro	35	213,500
33	KANO	Hadejia-Kirikasama-Nguru	47	427,000
34	"	Gumel-Maigatari	14	128.100
35	BENUE	Gboko-Gakem	48	233,790
			2627½	14,728,000

8.7. The first twelve roads on this list constitute the Bornu Railway Extension Feeder Roads network and are accorded equal priority. This project also includes provision of £600,000 for preliminary investigations and surveys, £200,000 for minor improvements to trunk roads 'B', £200,000 for improvements to townships and stations roads, £500,000 for roads and services in new layouts, and £750,000 for plant and vehicles, bringing the total cost of the project to £16,978,000.

CHAPTER 9

Water Supplies

9.1. Government has always recognised that water supplies are a basic requisite for any development, economic and social. For many years now large amounts have been expended on the provision of both urban and rural water supplies. The last two years of the extension to the 1955-60 plan saw the expenditure of well over £2½m. on this vital amenity.

I - RURAL WATER SUPPLIES

9.2. The Rural Water Supplies programme for wells and bore-holes will be continued, at an estimated total cost of £3.1m.

Project H.1 - STAFF AND OTHER CHARGES

9.3. This project covers the personal emoluments and other expenses of staff employed on rural water supplies.

Projects H.2 - H.19

9.4. Provision is made for provincial allocations for wells, for investigation and production drilling, for equipment, plant and vehicles, and headquarters expenses.

II - URBAN WATER SUPPLIES

9.5. In the new Urban Water Supplies programme the high rate of expenditure will be continued as far as limited resources permit. A new feature will be the great expansion of urban water supplies. The highest priority has been given to the extension of a number of existing supplies in places where industrial demand is likely to be heavy.

Project H.101 - STAFF AND OTHER CHARGES

9.6. Provision is made for the personal emoluments and other expenses of staff employed on urban water supplies.

Project H.102 - CARRY-OVER FROM 1960/62 PLAN

9.7. This item is self-explanatory.

Project H.103 - URBAN WATER SUPPLIES NEW PROJECTS 1962/68

9.8.

	Estimated Total Cost
Preliminary Investigations and Surveys	£ 300,000
Hydrological Investigations	24,000
Minor Extensions to existing supplies	100,000
Plant and Vehicles	250,000
Waterworks Equipment	30,000
Kaduna Extensions	1,500,000
Zaria Extensions	250,000
Sokoto Extensions	400,000
Jos Extensions	100,000
Jos Industrial Area	250,000
Gusau Extensions	300,000
Maiduguri Extensions	250,000
Ilorin Extensions	26,680
Total:	£3,780,680

9.9. The total cost of the Urban Water Supplies programme is therefore £5,185,000.

CHAPTER 10

Health

10.1. The Medical and Health Deveopment Plan is aimed at establishing over a period of years, a fully integrated curative and preventive service, operating throughout the Region. This service will be based, as it is now, on a network of dispensaries feeding patients to rural health centres which in turn will send patients to hospitals. The ultimate aim is to establish one 60 - 100 bed hospital in each Parliamentary Constituency (since these constituencies provide standard units of population unlike Provinces and Divisions) which will eventually provide approximately one bed per thousand of the population. This however, is a long-term project since there are over 170 Parliamentary Constituencies whilst there are at present only 33 Government hospitals. Each country-type hospital costs £120,000 in capital and needs £17,000 a year in recurrent costs. Rural Health Centres are at the moment established only in areas where there is a specific rural health scheme but the ideal is to establish them on a widespread basis.

10.2. While this vertical curative structure is being built up, special programmes for the control of endemic and epidemic diseases, particularly sleeping sickness, leprosy, yaws, malaria and cerebro-spinal meningitis, will continue to operate in association with W.H.O. and UNICEF.

10.3. Native Authorities and Voluntary Agencies are responsible for operating the dispensary services, aided by capital and recurrent grants from Government. There are nearly 700 dispensaries throughout the Region but a total of 1,800 is needed to provide one dispensary per 10,000 persons. The Native Authorities are being advised what their individual aims should be, bearing in mind the Government's three priorities of education, natural resources and communications. Considerable progress is now being made as a result of the training facilities offered by the Medical Auxiliaries Training School, Kaduna.

10.4. Two Rural Health Centres exist at the moment, two more are under construction and one more is planned for 1962-68. Many more will be required to reach the ultimate aim of one to every 5 dispensaries.

10.5. Ten new country-type hospitals each of 60 beds are planned at an estimated cost of £132,000 each. The programme of extension to and modernisation of existing hospitals will be continued.

10.6. Government's aims in the field of training cannot be fully achieved during the period of this Plan. A major limiting factor is the provision of trained staff at all levels, from Specialists to Laboratory Assistants. The 1955-62 Plan laid great emphasis on training and a number of new training institutions are now in operation, producing the trained staff necessary for the hospitals, dispensaries and rural health services. But in order to meet the requirements of the 1962-68 Plan, further large expansions are necessary, particularly to the institutions for training Nurses, Midwives, Community Nurses, Medical Auxiliaries, Health staff, Laboratory staff, and Pharmacists.

10.7. The process of training a Doctor takes 8 years. There are now only seven Northern Doctors; twenty-four Northerners are studying medicine in this country and abroad and it is hoped that they will all qualify during the period of the Plan. Twenty more are in training with a view to taking up medical studies. The manning of the Region's medical services with its own Doctors cannot therefore be achieved in the immediate future but it is intended to institute an accelerated programme of scholarships for medical training.

10.8. Dental Services will be expanded to meet the growing demand.

Project I.1 - PHARMACY SCHOOL AND LABORATORY

10.9. (a) Pharmacy School, Zaria.

This institution, which trains pharmacists for the Regional Hospital and Stores services, in the past only provided training to the standard of Certified Dispensers. To achieve the standards set by the Federal Pharmacy Board and bring the North into line with the other Regions and the Federal Government, it has been upgraded to provide training to the Chemist and Druggist Diploma standard. For this additional buildings, equipment and staff are required.

(b) Schools of Laboratory Technology, Kaduna and Jos.

The increasing number of Hospitals and the increasing reliance of medical officers on the Pathology services necessitate an expansion of the already inadquate Regional Laboratory in Kaduna. The Laboratory Assistants' School, Jos, is now training about a dozen Assistants every two years. As the number of hospitals in the North increases, so will the demand for Laboratory Assistants. The Schools will therefore be enlarged.

Project I.2 - NURSES' TRAINING

10.10. The Nurses' Preliminary Training Schools and teaching accommodation at the Nurse Training hospitals are to be expanded to permit of a larger intake of student nurses to meet the increased staffing demands of the new hospital building programme. More hostel accommodation will be provided for student nurses as one of the reasons for the high proportion of failures in the final qualifying examinations is that most of them live in rented quarters or stay with friends, to the detriment of their studies. Each Hostel will have a resident Supervisor. Additional quarters will also be required for the Nurse Tutors to be supplied under the United Kingdom Technical Assistance Programme.

Project I.3 - MIDWIVES' TRAINING

10.11. Provision has been made for teaching accommodation, hostels and quarters for Tutors and Nursing Sisters. The remarks under Project I.2 also apply to this Project.

Project I.4 - NEW COUNTRY-TYPE HOSPITALS

10.12. The ten new country-type hospitals are a proved standard design comprising two 30-bed wards, Administration block, 'out-patients' Department, X-ray Unit, Laboratory, operating theatre, kitchen, laundry, mortuary, amenity wards and sanitary annexes. Electricity and running water are included.

Project I.5 - IMPROVEMENTS TO HOSPITALS

10.13. Improvements to existing hospitals for which provision is made include the completion of Gombe

Hospital (started with Native Authority funds), the rebuilding of Pankshin Hospital, improvements to Maiduguri Hospital, extensions to the Kaduna Nursing Home and the conversion of the old Kaduna Hospital for other medical purposes. Additional medical officers quarters at Gusau, Wukari, Keffi, Birnin Kudu, Oturkpo, Offa, Birnin Kebbi, Azare, Hadejia, Gombe, Bama, Mubi and Ganye Hospitals, which are increasingly busy, will also be provided under this project heading.

Project I.6 - MODERNISATION OF EXISTING HOSPITALS

10.14. All existing hospitals require modernisation and extension which is estimated to cost £144,000.

Project I.7 - PSYCHIATRIC FACILITIES

10.15. Infirmaries are required for those mental cases now confined in Federal Government Prisons since the Federal Government has asked that the present inmates be removed. It is proposed to provide a Psychiatric wing at Zaria which will be used by the Specialist Psychiatrist for treatment and observation of mental cases.

Project I.8 - TUBERCULOSIS CONTROL

10.16. A clinic to be established at Kano will be the first step in combating this dread disease, which is most prevalent in urban areas.

Project I.9 - OTHER HOSPITAL EQUIPMENT

10.17. This project will provide needed equipment for a number of older hospitals.

Project I.10 - PREVENTIVE SERVICE TRAINING

10.18. The Medical Auxiliaries' and Community Nurses' Training Schools will be extended. The former trains all Native Authority Dispensary staff, and both Native Authority and Government leprosy and Medical Field Unit staffs. The Native Authorities are being encouraged to provide one dispensary per 10,000 of population and they must have the necessary trained personnel to man these dispensaries. The School at present produces about 130 trained Attendants every two years but it is necessary to increase this figure. The latter school trains Community Nurses to run Native Authority Maternity and Child Welfare Services. The output of Community Nurses is to be sharply increased.

Project I.11 - HEALTH SERVICES

10.19. The object of this project is to consolidate and provide headquarters for the various rural health services which, in some Provinces, are at present scattered and accommodated in temporary or derelict buildings. Both Leprosy and Sleeping Sickness Services are in process of being strengthened by the recruitment of officers trained in these diseases and housing will be provided for them under this project heading.

Project I.12 - IGALA - IDOMA SCHEME

10.20. The Igala - Idoma Scheme is the follow-up, in conjunction with WHO/UNICEF, of the Yaws Eradication Scheme in the area. The Native Authorities are themselves contributing by providing more dispensaries.

Project I.13 - HADEJIA RIVER VALLEY SCHEME

10.21. The Hadejia River Valley is one of the endemic foci of Sleeping Sickness and it is planned to launch an expanded eradication campaign.

Project I.14 - SCHOOLS HEALTH SERVICE, KANO

10.22. The Kano Schools Health Service is an important project which will take advantage of the Native Authority's universal primary education scheme in the City, through the provision of washing facilities at each school, thereby inculcating the virtues of soap and water.

Project I.15 - HEALTH EDUCATION

10.23. The present programme will be expanded by making greater use of posters and the radio; the new television service will also be used and, now that trained staff are available, the newly-formed Health Education Mobile Unit will start full operation.

Project I.16 - DENTAL SERVICES

10.24. The object of the Plan is to provide a Dental Centre in every Provincial Headquarters: there are at present only six. The Kaduna Centre is now inadequate and sited in an area required for commercial development; it will be rebuilt near the new General Hospital. The Maiduguri centre occupies one of the hospital buildings now required for other purposes.

Project I.17 - GRANTS-IN-AID

10.25. Four Combined Hospitals have been built by the missions with Government funds. They are staffed by the missions but most expenses are covered by Government Grants. Extensions to all four are needed. All missions have plans for building additional private hospitals. It is, however, not Government's policy to make initial capital grants for new hospitals but only for extensions once the hospital is well established.

A capital grant of 50% is made towards the cost of each Native Authority Dispensary or Health Centre built with Government's approval. A large part of the leprosy work is in the hands of the missions who run the Provincial Leprosy Settlements and many treatment centres. Extensions to these also qualify for capital grants.

CHAPTER 11

Social Welfare and Co-operatives

Project J.1 - KADUNA STADIUM

11.1. In order to provide training facilities for all kinds of sport, at present in their infancy in Northern Nigeria, construction of the Ahmadu Bello Stadium was commenced at Kaduna in 1960 at a total estimated cost of £800,000. Work on this stadium is in progress and a liability of £610,000 has been accepted for the completion of the project from 1962-1964.

Project J.2 - PROVINCIAL STADIA

11.2. As part of a plan to provide modern playing grounds in each of the 13 Provincial Headquarters in Northern Nigeria, this programme will provide stadia for the Provincial Headquarters not already so equipped at a total cost of £35,000.

Project J.3 - OFFICE BUILDINGS

11.3. The expansion of activities in both Co-operative and Social Welfare Divisions necessitates the building of more office accommodation in the Provinces for supervision of newly formed societies and development of such social welfare work as probation, youth clubs, and child- and family-welfare. The cost of construction of the required offices is estimated at £26,000 over the years 1962-1966.

CHAPTER 12

Town and Country Planning

12.1. Two major developments in this field are planned, the development of Greater Kano as the major town of the Region and an international entry point of the Federation to cater for an expansion of the population to 300,000 people by 1970 and the establishment of a Lands Division in the Ministry of Land and Survey to administer the Government's land policies in the Provinces. Other items include the re-organisation and re-equipping of the Survey Division to enable it to keep pace with the growing demands on it.

12.2. Provision for the Greater Kano Town Plan, included under this section in the outline programme published in March 1961 has now been transferred to the heading of Development Corporation (see Chapter 6). The provision for offices and housing, for the proposed Lands Division has been transferred to the headings of Administrative and Judicial Buildings and Development Corporation respectively.

Project K.1 - TOWN PLANNING DIVISION HEADQUARTERS OFFICE

12.3. The present Town Planning Division office was built of temporary materials in 1954-55 as an emergency measure, when the Division was transferred at short notice from the Ministry of Works. The upkeep is uneconomic and the accommodation is inadequate for the present approved establishment. Proper quarters are to be provided at a cost of £6,000.

Project K.2 - TWO SANTONI PLOTTERS

12.4. By 1963 a number of Northern personnel will have been trained to operate plotting machines. Thereafter, a greater proportion of the mapping will be carried out in Kaduna, utilising two Santoni plotters to be purchased at a cost of £2,400.

Project K.3 - SURVEY RECORDS BUILDING and

Project K.4 - EQUIPMENT TO COPY AND PRESERVE ORIGINALS

12.5. On Regionalisation, no provision was made to supply the Regions with Survey records and other relevant information. The task of examining the Lagos records and extracting and photostating this invaluable information has been postponed from one year to another for various reasons. These projects provide for an immediate start to be made on transcription and filing of the basic survey records of the Northern Region.

Project K.5 - EXTENSION TO STORES AND AIR-CONDITIONING

12.6. It is necessary to protect the valuable equipment in the Survey Store by air-conditioning part of the accommodation. The cost of £5,000 will be more than justified by the saving in damage due to extremes of climate, harmattan dust and the humidity of the wet season.

CHAPTER 13

Housing

13.1. As standards of living rise so will better housing be required by the people. From an economic point of view investment in housing is particularly important in stimulating activity in many other fields, by providing work for labourers and artisans directly, and indirectly through such occupations as furniture-making.

13.2. The Government is intending to tackle this problem in several ways. The first of these is through the Native Authority Housing Corporation. Under this scheme individuals will apply to their Native Authorities, and, if the applications for loans are recommended, the Corporation will then finance the building of their houses up to certain maximum values, the repayment of the loans being guaranteed by the Native Authorities. The capital of the Corporation will be approximately £1 million, of which about half will come from overseas, mostly United Kingdom, sources. It is expected that the building of about 1,000 houses will be financed in this way in the first instance.

13.3. In addition to this, provision has been made under the Development Corporation heading, for further housing estates, particularly in Kaduna, Kano and Zaria at a total cost of £1,000,000. (Project E.16).

13.4. Apart from the problem of assisting private individuals to obtain better housing, there is the very serious problem of quarters for Government Officers. Existing housing is barely sufficient although the establishment is below full strength. Four hundred quarters are urgently required in the Region to serve the needs of full-strength establishment, for foreign aid experts and technicians and for expansion of certain services. This figure is however exclusive of institutional housing; the Ministry of Education alone has included in its proposals housing requirements for fourteen hundred additional staff, mostly teachers.

13.5. It is clear that the problem is vast and costly and Government cannot accept indefinitely the growing liability of supplying a limited class of senior civil servants with subsidised housing. If such housing is to be placed on a commercial basis, some organisation will be necessary to deal with it on a far greater scale and with far wider scope than is at present within the power of the N.A. Housing Corporation. Ways and means of establishing such a commercial organisation and of attracting overseas capital and aid to it are being examined.

13.6. The costs of building, particularly of housing, in Nigeria are very high and the Government is utilising the experience of other countries in trying to lower them. To this end the services of low-cost building experts have been sought under technical assistance programmes so that by using modern techniques the best use may be made of the limited funds available.

13.7. As it is hoped that it may be possible to attract foreign capital to assist in the building of housing, the sum of £2,000,000 has been provisionally included under the "Development Corporation" heading (Project E.17).

SECTION C

GENERAL SERVICES

CHAPTER 14

Information and Television

14.1. The Government has recently established a Ministry of Information, the functions of which are:

(1) to enable the people to play an intelligent part in the democratic government of their Region;

(2) to keep the people well-informed so that they can co-operate with the Government in raising their standards of living;

(3) to enable the people to help themselves, for example, in protecting themselves, their animals and their crops from diseases;

(4) to make known the Northern Region overseas; and

(5) to attract visitors to the Region and make their stay agreeable and interesting.

14.2. The circulation of books is one of the most obvious ways of achieving much of this programme, and it is therefore planned to provide a new Regional Library Headquarters building in Kaduna.

14.3. In pursuance of its policy of bringing the latest media of information, education and entertainment to the people of the Northern Region, the Government has set up a Television Corporation empowered to form an operating company to provide television and sound-broadcasting services throughout the Region. The Company has been set up and will provide a sound-broadcasting service to cover the entire Region: the television service will initially be restricted to the centres of Kaduna, Zaria and Kano.

Project L.1 - PROCESSING PLANT

14.4. At present film is sent to the United Kingdom for processing with attendant delay and increased expense. It is proposed to provide a processing plant and dubbing facilities, enabling local newsreels to be produced while the subject matter is still topical and special films at short notice for public enlightenment programmes.

Project L.2 - REGIONAL LIBRARY: EXPANSION

14.4. This project provides for a new building to house the Regional Library which has outgrown its present accommodation, and a stock-stack of books for distribution to Provinces under the existing book-box scheme. The existing Regional Library building will be adapted to house the film processing plant.

CHAPTER 15

Other Services

I - ADMINISTRATIVE AND JUDICIAL BUILDINGS

15.1. The steady increase in Government activities makes necessary further increases in office accommodation. These buildings, which are not revenue earning, are expensive and every effort is being made to restrict building and costs to the essential minimum. In this spirit it has been decided to postpone indefinitely the building of a new High Court in Kano, long desired and planned.

Project M.1 - PROVINCIAL OFFICE EXTENSIONS

15.2. Provision is made for extensions for the Provincial Offices at Ilorin, Yola, Zaria and Kano where overcrowding of Government Departments is acute. The cost will be £61,200 over the six years.

Projects M.2 and M.5 - MOTOR LICENSING OFFICES AND CAR AND KIT STORES

15.3. Offices costing £1,000 each are to be provided in each province for motor licensing: this function was recently taken over by the Provincial Administration from the Nigeria Police and the offices are at present housed in temporary or borrowed accommodation. Car and kit stores are to be built at Mubi, Ilorin, Sokoto and Maiduguri at a total cost of £5,000.

Projects M.3 and M.4 - WIVES QUARTERS AT RESIDENCIES AND PERMANENT SECRETARIES' HOUSES

15.4. Extensions to houses for senior muslim officers will be accomplished on a standard plan costing £1,000 per house to provide extra bedrooms and bathrooms. All Residencies in the provinces and twelve Permanent Secretaries houses in Kaduna will be extended at a total cost of £24,000.

Projects M.6 and M.7 - IMPROVEMENT TO TEMPORARY AND SEMI-PERMANENT QUARTERS AND PERMANENT REST HOUSE EXTENSION

15.5. Improvements to semi-permanent housing, much of which remains in the provinces, will cost £13,600.

Provision of £21,000 has been made to continue the programme of replacing temporary mud and thatch rest houses in country districts with permanent buildings which cost between £800 and £1,200 each.

Projects M.8, M.9 and M.13 - OFFICE BLOCKS, KADUNA INSTITUTE OF ADMINISTRATION KANO TOWN PLANNING AUTHORITY OFFICES

15.6. In Kaduna, the pressure on existing office accommodation in Ministries will be relieved by the construction of three office blocks costing £40,000 each or with one £80,000 block and one £40,000 block. At the Zaria Institute of Administration £51,000 is provided to build a library and Assembly Hall. In Kano, the proposed Planning Authority will be accommodated in a 24-office block to cost £51,000.

Projects M.10 and M.11 - REPLACEMENT OF AIRCRAFT AND CONSTRUCTION AND IMPROVEMENT OF AIRFIELDS

15.7. The Aircraft of the Northern Region Communications flight must be replaced before the expiration of the Plan period at a cost of £55,000. New airstrips and improved existing strips in the provinces will cost £25,500.

Project M.12 - HIGH COURT AND MAGISTRATES COURT BUILDINGS

15.8. Conversions of existing judicial buildings will provide a second court and chambers for a Judge in Kano and for a judge who will reside at Makurdi, at a cost of £12,000. To accommodate a second magistrate at Kano, an additional magistrates Court will be built for £7,000 and new Magistrates Courts will be built at Bauchi and Maiduguri and Ilorin at £7,000 each.

Project M.14 - CARRY-OVER FROM 1960/62 PLAN EXTENSION

15.9. The sum of £321,400 is required to complete projects begun in the 1955-62 development plan. These include the completion of the new Regional Legislature, the State House and Cabinet Offices, the High Court in Kaduna and the new provincial offices in Lokoja and Sokoto. Air conditioning is to be installed in the House of Chiefs and it has proved necessary to provide the Agent-General in London with a larger house more suited for hospitality and accommodation of important visitors to London from the Region.

II - MINISTRY OF ESTABLISHMENTS AND TRAINING.

Project N.1 - STAFF TRAINING CENTRE

15.10. The need for a Staff Training Centre arises from Government's decision to upgrade the Institute of Administration, Zaria, which has hitherto provided training facilities, so as to incorporate it in the new University. The establishment of such a centre was also recommended by the Ford Foundation Report on Training, which has been accepted by Government. The Centre will be non-residential and will cater for courses in English and in clerical and secretarial training. Courses will also be run for all grades of civil servants, including an introductory course on first appointment.

15.11. The provision of £61,000 is a provisional figure and exact plans have yet to be drawn up. It is possible that the Ford Foundation may give assistance to this project.

III - MINISTRY OF INTERNAL AFFAIRS

15.12. The maintenance of law and order in the North is very largely the responsibility of the N.A. Police forces, comprising over 6,000 men. To keep pace with the many demands that modern society makes upon its police force, especially with the growing amount of motor traffic offences, and the increasing complexity of the laws, it is intended to expand training facilities for N.A. police at the Northern Police College. Plans are in hand to extend the present residential training accommodation; to provide specialist courses in forensic science, inspectorate duties and advanced courses for senior personnel. An entirely new step will be to provide basic facilities for the training of women police.

Project O.1 - BUILDINGS

15.13. Provision has been made for expansion of the training facilities for Native Authority Police at the Northern Police College, Kaduna, at a cost of £69,784. £23,790 is required for extensions to the buildings of the Printing Division.

Project O.2 - VEHICLES

15.14. Provision of £6,000 has been made for the cost of two lorries and a garage at the Northern Police College, necessitated by the proposed expansion of the Native Authority Police Wing.

SECTION D

RESOURCES

CHAPTER 16

Resources

16.1. The total capital expenditure programme of the Northern Region for the six years 1962-68 is expected to reach £97.7 million, excluding separate Native Authorities programmes. The rate of expenditure in the Northern Region is increasing at a rapidly accelerating rate. For 1955-56 capital expenditures were but £1.29 million; in 1960-61 (the last year for which complete figures are available) capital expenditures had reached £6.86 million.

16.2. Direct capital expenditure by Government will be £65.1 million, which together with total recurrent expenses estimated at £195.0 million for the six-year period will bring the total direct commitments (including increased public debt charges of £9.0 million) to £260.1 million for the period. To this must be added the total planned expenditure by Development Corporations whichis expected to be £32.6 million. Total expenditure over the period is therefore estimated at £292.7 million. Revenue (see Table A) will be £240.1 million, internal borrowing being estimated very conservatively at £12.0 million and external aid at some £44 million, the 50% limit adopted by all Governments for planning purposes. When underspending, both Capital and Recurrent, and special grants from the Federal Government in aid of the Educational Programme are taken into account a gap of £28.6 million between revenue and expenditure is left. It is hoped that this will be wholly or largely covered by the device referred to in Chapter 6 of establishing a Development Bank, on sound commercial principles, to finance the Development Corporation Programme. By revolving the Bank's funds, and by careful selection of programmes most likely to yield a quick and substantial return, it is hoped to finance a large programme for a comparatively small initial outlay.

16.3. In respect of choice of activities under the Development Programme, and their priorities, a determined effort has been made to choose programmes which may be expected to result in the quickest and largest increase in gross domestic product in an effort to speed up the process of generating increased income. In considering size of programmes, the Northern Region have attempted to be realistic in two prime respects:-

1. The practical limitation on the size of programmes placed by shortages of trained

key personnel at various levels has been recognised. As trained Northerners become available, the capacity to handle larger projects will also grow.

2. The aim has been to plan programmes with a maximum of reliance on local revenues, and a minimum on foreign aid. It has been constantly borne in mind that no matter how generous the response to possible requests for outside aid, the Northern Region must avoid committing itself to programmes which might swell recurrent costs beyond the capacity to generate revenue locally. Thus a proposed gift of capital may in some instances be too expensive to accept, if the recurrent costs generated are high. Likewise, borrowings generate recurrent cost problems in the form of debt charges, to be met from revenue. The guiding rule of the Northern Region has been, consequently, always to stay safely within safe financial limits while at the same time exploiting every possible source of revenue.

TABLE A

	£ Million	
1. Resources		
(a) Existing Sources	140.5	
(b) New Sources	55.6	
	196.1	196.1
2. Recurrent Expenditure	195.0	
Less underspending	9.8	
	185.2	185.2
3. Available for Capital Programme		10.9
4. Planned Capital Expenditure	97.7	
Less underspending	9.8	
	87.9	87.9
5. Gap. (4-3)		77.0
6. Assumed Foreign Aid *		44.0
7. Uncovered Gap (5-6)		33.0
8. Less Education Grant from Federal Government		4.4
		28.6

Note: * ½ Planned Capital Expenditure less underspending.

CAPITAL REQUIREMENTS 1962-68

SUMMARY SHEET

1.2.62

	Section	1962-63	1963-64	1964-65	1965-66	1966-67	1967-68	Six years 1962-68
A.	Agriculture	1,773,500	1,243,500	940,900	592,700	351,500	303,000	5,205,100
B.	Animal Resources	856,400	751,965	574,065	500,085	392,500	456,600	3,531,615
C.	Forestry	79,770	74,760	96,877	68,958	76,688	75,061	472,114
D.	Trade & Industry	94,850	88,850	-	-	-	-	183,700
E.	Development Corporations	6,312,355	5,962,210	4,258,720	4,658,540	5,240,380	6,139,580	32,571,785
F.	Education	3,893,552	3,138,867	3,006,905	2,945,385	2,982,883	2,983,037	18,950,629
G.	Communications	4,658,125	4,445,820	4,045,820	3,444,820	3,444,820	3,444,810	23,484,215
H.	Water Supplies (Rural)	506,585	516,680	516,680	516,685	510,685	496,810	3,064,125
	Water Supplies (Urban)	997,220	1,553,900	1,373,220	668,220	372,220	220,220	5,185,000
I.	Health	1,109,760	528,180	524,750	320,220	416,800	416,800	3,316,510
J.	Social Welfare and Co-operatives	427,000	217,000	17,000	10,000	-	-	671,000
K.	Land and Survey	19,400	500	500	500	-	-	20,900
L.	Information	90,000	-	-	-	-	-	90,000
M.	Administrative and Judicial Buildings	422,400	118,700	118,200	85,560	59,600	8,000	812,460
N.	Training	31,000	10,000	5,000	5,000	5,000	5,000	61,000
O.	Internal Affairs	45,734	51,500	-	-	-	-	97,234
	TOTALS	21,317,651	18,702,432	15,478,637	13,816,673	13,853,076	14,548,918	97,717,387

CAPITAL REQUIREMENTS 1962-68

Ministry of Agriculture

Revised to 1.2.62

No.	Project Title	1962-63	1963-64	1964-65	1965-66	1966-67	1967-68	Six Years 1962-68
I	Development of Basic Natural Resources							
A.1	Water Resources and Irrigation	750,500	513,500	517,900	367,700	155,000	115,000	2,419,600
A.2	Soil Surveys	23,000	6,000	3,000	2,000	2,000	1,500	37,500
A.3	Soil Conservation	78,000	66,000	50,000	48,500	48,500	48,500	339,500
A.4	Mines Land Reclamation	20,000	20,000	20,000	15,000	-	-	75,000
II	Educational and Demonstration							
A.5	School of Agriculture - Riverain - Completion	150,000	70,000	-	-	-	-	220,000
A.6	School of Agriculture - Samaru - Extension	70,000	31,000	-	-	-	-	101,000
A.7	Farm Training Centres	50,000	25,000	-	-	-	-	75,000
A.8	Farm Centres - New	30,000	30,000	-	-	-	-	60,000
	SUB-TOTALS	1,171,500	761,500	590,900	433,200	205,500	165,000	3,327,600

./continued

C A P I T A L   R E Q U I R E M E N T S   1962-68

Ministry of Agriculture

Revised to 1.2.62

No.	Project Title	1962-63	1963-64	1964-65	1965-66	1966-67	1967-68	Six Years 1962-68
	Carried forward	1,171,500	761,500	590,900	433,200	205,500	165,000	3,327,600
A.9	Farm Centres - Improvements	40,000	40,000	20,000	-	-	-	100,000
A.10	Farm Institutes	45,000	45,000	45,000	45,000	31,500	31,500	243,000
A.11	Assistance to Mechanical Cultivation	20,000	20,000	20,000	15,000	15,000	10,000	100,000
A.12	Lake Chad Fisheries	25,500	10,000	10,000	10,000	10,000	7,000	72,500
A.13	River Fishing	-	23,000	22,500	-	-	-	45,500
A.14	Pond Fishing	11,000	11,000	8,000	8,000	8,000	8,000	54,000
A.15	Apiculture	3,000	3,000	3,000	3,000	3,000	3,000	18,000
A.16	Quelea Control	40,000	40,000	40,000	40,000	40,000	40,000	240,000
A.17	Fruit and Vegetable Gardens	1,000	2,500	2,500	2,500	2,500	2,500	13,500
A.18	Tree Crop Programme	25,000	20,000	15,000	15,000	15,000	15,000	105,000
A.19	Assistance to Improved Farming	15,000	17,000	17,000	17,000	17,000	17,000	100,000
A.20	Cereal Research	71,500	64,500	-	-	-	-	136,000
	SUB - TOTALS	1,468,500	1,057,500	793,900	588,700	347,500	299,000	4,555,100

./ continued

CAPITAL REQUIREMENTS 1962-68

Ministry of Agriculture

Revised to 1.2.62

No.	Project Title	1962-63	1963-64	1964-65	1965-66	1966-67	1967-68	Six Years 1962-68
	Carried forward	1,468,500	1,057,500	793,900	588,700	347,500	299,000	4,555,100
III	General Support							
A.21	Buildings	295,000	182,000	143,000	-	-	-	620,000
A.22	Stores and Office Equipment	10,000	4,000	4,000	4,000	4,000	4,000	30,000
	T O T A L S	1,773,500	1,243,500	940,900	592,700	351,500	303,000	5,205,100

CAPITAL REQUIREMENTS 1962-68

Ministry of Animal Resources

Revised to 1.2.62

No.	Project Title	1962-63	1963-64	1964-65	1965-66	1966-67	1967-68	Six Years 1962-68
B.1	Rinderpest Control	122,700	68,200	59,700	59,700	-	-	310,300
B.2	Tsetse Eradication	141,920	118,260	118,860	108,800	108,800	108,800	705,440
B.3	Sheep Improvement							
	(a) Katsina	5,600	3,100	2,000	2,000	1,000	1,000	14,700
	(b) Bulassa	5,800	3,100	1,000	1,000	-	-	10,900
	(c) Purchase Stock	6,650	7,250	7,250	1,000	-	-	22,150
	(d) Capital construction	2,000	2,000	1,500	1,500	1,500	1,500	10,000
B.4	Goat Improvement							
	Breeding Centre Sokoto	7,000	6,000	2,000	1,000	1,000	1,000	18,000
B.5	Lab. and Invest. Services	25,000	3,000	14,500	5,500	5,000	5,000	58,000
B.6	Poultry Improvement	16,200	18,800	16,800	17,700	15,700	14,800	100,000
B.7	Vet. School Kaduna	75,000	15,000	-	-	-	-	90,000
B.8	Fulani Amenities							
	(a) Treatment Centres	5,000	5,000	5,000	5,000	5,000	5,000	30,000
	(b) Range Management	10,000	10,000	5,000	5,000	5,000	5,000	40,000
	(c) Water Development	40,000	20,000	10,000	10,000	10,000	10,000	100,000
	(d) Fencing & Demarcation	10,000	10,000	10,000	10,000	5,000	5,000	50,000
	(e) Reservations	10,000	10,000	10,000	10,000	5,000	5,000	50,000
	SUB-TOTALS	482,870	299,710	263,610	238,200	163,000	162,100	1,609,490

../continued

CAPITAL REQUIREMENTS 1962-68

Ministry of Animal Resources

Revised to 1.2.62

No.	Project Title	1962-63	1963-64	1964-65	1965-66	1966-67	1967-68	Six Years 1962-68
	Carried forward:	482,870	299,710	263,610	238,200	163,000	162,100	1,609,490
	(f) Boreholes equipment	50,000	50,000	-	-	-	-	100,000
	(g) Supplementary feeding	65,000	65,000	80,000	130,000	130,000	195,000	665,000
B.9	Schemes ex Min. of Agric.							
	(a) Dry season fodder conservation	20,000	20,000	10,000	10,000	10,000	10,000	80,000
	(b) Development Grazing areas	50,000	50,000	50,000	50,000	50,000	50,000	300,000
	(c) Cattle breeding ranches	96,000	186,000	112,000	22,000	12,000	12,000	440,000
	(d) Improvements to Cattle Marketing Centres	12,000	8,000	5,000	5,000	5,000	5,000	40,000
B.10	Animal Industries							
	(a) Provincial Cattle Markets	2,500	2,500	2,500	2,500	2,500	2,500	15,000
	(b) Stock Routes	10,000	10,000	10,000	5,000	5,000	5,000	45,000
	(c) Cattle railing facilities	6,000	5,000	5,000	5,000	5,000	5,000	31,000
	(d) Tanneries	47,030	40,755	25,955	25,385	-	-	136,125
	(e) Hides & Skins improvement	15,000	15,000	10,000	10,000	10,000	10,000	70,000
	TOTALS	856,400	751,965	574,065	500,085	392,500	456,600	3,531,615

CAPITAL REQUIREMENTS 1962-68

Ministry of Animal & Forest Resources, FORESTRY Division Revised to 1.2.62

No.	Project Title	1962-63	1963-64	1964-65	1965-66	1966-67	1967-68	Six Years 1962-68
C.1	Amelioration of Fuel Shortage	21,940	29,380	36,820	22,320	22,320	27,360	160,140
C.2	Acceleration of Planned Management of Reserves	30,920	17,820	17,820	17,820	23,420	17,820	125,620
C.3	Teak Plantations	10,000	12,000	12,000	12,000	15,000	15,000	76,000
C.4	Sawmill Industry	-	2,506	13,106	6,106	6,106	6,106	33,930
C.5	Office Accommodation	3,800	3,800	3,800	2,000	-	-	13,400
C.6	National Game Park, Yankari	2,000	2,000	7,000	2,300	2,300	2,300	17,900
C.7	Mambilla Plantations	3,500	3,120	3,120	3,120	3,120	3,120	19,100
C.8	National Game Park, Borgu	7,610	5,034	3,311	3,292	4,422	3,355	26,024
	TOTALS	79,770	75,660	96,977	68,958	76,688	75,061	472,114

CAPITAL REQUIREMENTS 1962-68

Ministry of Trade & Industry

Revised to 1.2.62

No.	Project Title	1962-63	1963-64	1964-65	1965-66	1966-67	1967-68	Six Years 1962-68
D.1	Industrial Surveys and Consultants' Fees	18,000	12,000	-	-	-	-	30,000
D.2	Offices	6,100	6,100	-	-	-	-	12,200
D.3	Vehicles	3,750	3,750	-	-	-	-	7,500
D.4	Industrial Development Centre	67,000	67,000	-	-	-	-	134,000
	TOTALS	94,850	88,850	-	-	-	-	183,700

CAPITAL REQUIREMENTS 1962-68

Development Corporation

Revised to 1.2.62

No.	Project Title	1962-63	1963-64	1964-65	1965-66	1966-67	1967-68	Six Years 1962-68
E.1	Poultry Production Credit	25,000	25,000	25,000	20,000	15,000	15,000	125,000
E.2	Kaduna Meat Marketing Centre							
	Abattoir & by-products Plant	40,000	35,000	-	-	-	-	75,000
	Retail Meat Shop	-	5,000	5,000	-	-	-	10,000
	Cattle Market Kaduna	5,000	-	-	-	-	-	5,000
	Pig Slaughter House	-	7,000	-	-	-	-	7,000
	Cattle Fattening Ranch	20,000	20,000	-	-	-	-	40,000
	Sheep " "		13,000	-	-	-	-	13,000
E.3	Provincial Abattoirs	40,000	60,000	60,000	40,000	40,000	40,000	280,000
E.4	Meat Chilling Plants	25,000	25,000	25,000	25,000	-	-	100,000
E.5	Cattle Feeding Ranches	60,000	60,000	30,000	30,000	30,000	30,000	240,000
E.6	Wheat Mechanisation	50,000	75,000	75,000	50,000	25,000	25,000	300,000
E.7	Fertiliser Distribution	98,200	196,400	294,600	392,800	523,200	982,000	2,487,200
E.8	Cotton: Fertiliser & Insecticide Distribution	101,655	203,310	406,620	813,240	1,219,680	1,973,080	4,717,585
E.9	Lake Chad Fisheries	100,000	80,000	80,000	80,000	80,000	80,000	500,000
E.10	River Fishing		20,000	20,000	20,000	20,000	20,000	100,000
E.11	Tree Plantations	100,000	300,000	300,000	400,000	400,000	262,000	1,762,000
E.12	Corn Storage Facilities	50,000	50,000	-	-	-	-	100,000
	Sub- TOTALS	714,855	1,174,710	1,261,220	1,871,040	2,352,880	3,427,080	10,855,785

../continued

CAPITAL REQUIREMENTS 1962-68

Development Corporation

Revised to 1.2.62

No.	Project Title	1962-63	1963-64	1964-65	1965-66	1966-67	1967-68	Six Years 1962-68
	Carried forward	714,855	1,174,710	1,261,220	1,871,040	2,352,880	3,427,080	10,855,785
E.13	Grain Reserve Purchases	87,500	87,500	87,500	87,500	87,500	87,500	525,000
E.14	Mixed Farming Loans	300,000	300,000	300,000	300,000	300,000	300,000	1,800,000
E.15	Assistance to Mechanical Cultivation	25,000	25,000	25,000	25,000	25,000	25,000	150,000
E.16	Housing Estates	200,000	175,000	275,000	175,000	175,000	-	1,000,000
E.17	Residential Quarters	300,000	300,000	300,000	300,000	400,000	400,000	2,000,000
E.18	Co-operative Bank	1,000,000	1,000,000	-	-	-	-	2,000,000
E.19	Government Investment in Industrial Firms	2,735,000	2,000,000	1,000,000	1,000,000	1,000,000	1,000,000	8,735,000
E.20	Industrial Areas	200,000	150,000	200,000	150,000	150,000	150,000	1,000,000
E.21	Electricity	250,000	250,000	250,000	250,000	250,000	250,000	1,500,000
E.22	Greater Kano	500,000	500,000	500,000	500,000	500,000	500,000	3,000,000
	TOTALS	6,312,355	5,962,210	4,258,720	4,658,540	5,240,380	6,139,580	32,571,785

CAPITAL REQUIREMENTS 1962-68

Ministry of Education

Revised to 1.2.62

No.	Project Title	1962-63	1963-64	1964-65	1965-66	1966-67	1967-68	Six Years 1962-68
F.1	Administration and Inspection	208,500	38,272	38,272	38,272	38,272	38,272	399,860
F.2	University	183,000	225,700	225,700	225,700	225,700	225,700	1,311,500
F.3	Adv. T.C.	183,000	220,000	74,020	-	-	-	477,020
F.4	Training Colleges	1,443,036	1,267,267	1,267,277	1,267,277	1,267,277	1,267,277	7,779,420
F.5	Secondary Schools	1,230,733	852,216	852,216	852,216	852,216	852,213	5,491,810
F.6	Primary	219,813	236,000	250,000	260,500	300,000	300,000	1,566,470
F.7	Polytechnic	125,470	98,110	98,125	98,125	98,125	98,125	616,080
F.8	Technical	300,000	201,293	201,295	201,293	201,293	201,293	1,306,467
	TOTALS	3,893,552	3,138,867	3,006,905	2,945,385	2,982,883	2,983,037	18,948,627

CAPITAL REQUIREMENTS 1962-68

ROADS DEVELOPMENT

Ministry of Works

Revised to 1.2.62

No.	Project Title	1962-63	1963-64	1964-65	1965-66	1966-67	1967-68	Six Years 1962-68
G.1	Personal Emoluments and Charges	490,910	501,820	501,820	501,820	501,820	501,810	3,000,000
G.2	Carry over of 60/62 Plan (including Wuya Bridge)	1,906,215	1,000,000	600,000	-	-	-	3,506,215
G.3	62/68 Plan including Railway Feeder Roads	2,261,000	2,944,000	2,944,000	2,943,000	2,943,000	2,943,000	16,978,000
	TOTALS	4,658,125	4,445,820	4,045,820	3,444,820	3,444,820	3,444,810	23,484,215

CAPITAL REQUIREMENTS 1962-68

I RURAL WATER SUPPLIES Ministry of Works Revised to 1.2.62

No.	Project Title	1962-63	1963-64	1964-65	1965-66	1966-67	1967-68	Six Years 1962-68
H.1	Staff and other charges	172,585	174,680	174,680	174,685	174,685	174,685	1,046,000
H.2	Adamawa	12,500	12,500	12,500	12,500	12,500	12,500	75,000
H.3	Bauchi	18,000	18,000	18,000	18,000	18,000	18,000	108,000
H.4	Benue	9,000	9,000	9,000	9,000	9,000	9,000	54,000
H.5	Bornu	27,000	27,000	27,000	27,000	27,000	27,000	162,000
H.6	Ilorin	9,000	9,000	9,000	9,000	9,000	9,000	54,000
H.7	Kabba	7,500	7,500	7,500	7,500	7,500	7,500	45,000
H.8	Kano	38,000	38,000	38,000	38,000	38,000	38,000	228,000
H.9	Katsina	20,000	20,000	20,000	20,000	20,000	20,000	120,000
H.10	Niger	11,500	11,500	11,500	11,500	11,500	11,500	69,000
H.11	Plateau	9,000	9,000	9,000	9,000	9,000	9,000	54,000
H.12	Sardauna	17,000	12,000	12,000	12,000	12,000	12,000	72,000
H.13	Sokoto	28,000	28,000	28,000	28,000	28,000	28,000	168,000
H.14	Zaria	7,500	7,500	7,500	7,500	7,500	7,500	45,000
H.15	Headquarters	9,000	9,000	9,000	9,000	9,000	9,000	54,000
H.16	Investigation Drilling	14,000	14,000	14,000	14,000	14,000	14,000	84,000
H.17	Production Drilling	66,000	66,000	66,000	66,000	66,000	66,000	396,000
H.18	Equipment	15,000	17,000	17,000	17,000	15,000	11,125	92,125
H.19	Plant & Vehicles	21,000	27,000	27,000	27,000	23,000	13,000	138,000
	TOTALS	506,585	516,680	516,680	516,685	510,685	496,810	3,064,125

CAPITAL REQUIREMENTS 1962-68

II URBAN WATER SUPPLIES

Ministry of Works

Revised to 1.2.62

No.	Project Title	1962-63	1963-64	1964-65	1965-66	1966-67	1967-68	Six Years 1962-68
H.101	Staff and other charges	88,220	88,220	88,220	88,220	88,220	88,220	529,320
H.102	Carry-over in 1960/62 Plan	250,000	250,000	250,000	125,000	-	-	875,000
H.103	1962/68 Plan	659,000	1,215,680	1,035,000	455,000	284,000	132,000	3,780,680
	TOTALS	997,220	1,553,900	1,373,220	668,220	372,220	220,220	5,185,000

CAPITAL REQUIREMENTS 1962-68

Ministry of Health

Revised to 1.2.62

No.	Project Title	1962-63	1963-64	1964-65	1965-66	1966-67	1967-68	Six Years 1962-68
I.1	Pharmacy School & Laboratory	32,900	30,000	12,700	-	6,100	-	81,700
I.2	Nurses' Training	159,400	49,300	49,300	-	-	-	258,000
I.3	Midwives' Training	68,700	56,500	7,300	-	-	7,300	139,800
I.4	New Country-Type Hospitals	396,000	132,000	132,000	132,000	264,000	264,000	1,320,000
I.5	Improvements to Hospitals	117,800	40,500	113,900	23,000	23,000	5,000	323,200
I.6	Modernisation of Hospitals	25,500	25,500	25,500	25,500	25,500	25,500	153,000
I.7	Psychiatric Facilities	14,200	3,200	3,200	3,200	3,200	-	27,000
I.8	Tuberculosis Control	49,650	-	-	-	-	-	49,650
I.9	Other Hospital Equipment	15,000	15,000	15,000	15,000	15,000	15,000	90,000
I.10	Preventive Service training	9,150	-	51,850	-	-	-	61,000
I.11	Health Services	30,520	32,980	22,000	12,100	-	-	97,600
I.12	Igala-Idoma Scheme	-	58,000	-	-	-	-	58,000
I.13	Hadejia River Valley Scheme							-
I.14	Schools Health Service, Kano	68,000	-	-	-	-	-	68,000
I.15	Health Education	4,000	4,000	5,000	7,000	7,000	8,000	35,000
I.16	Dental Services	32,940	12,200	-	13,420	-	-	58,560
I.17	Grants-in-Aid	76,000	59,000	77,000	79,000	63,000	82,000	436,000
I.18	Unallocated	10,000	10,000	10,000	10,000	10,000	10,000	60,000
&								
	TOTALS	1,109,760	528,180	524,750	320,220	416,800	416,800	3,316,510

CAPITAL REQUIREMENTS 1962-68

Ministry of Social Welfare & Co-operatives

Revised to 1.2.62

No.	Project Title	1962-63	1963-64	1964-65	1965-66	1966-67	1967-68	Six Years 1962-68
J.1	Kaduna Stadium	410,000	200,000	-	-	-	-	610,000
J.2	Provincial Stadia	10,000	10,000	10,000	5,000	-	-	35,000
J.3	Office Buildings	7,000	7,000	7,000	5,000	-	-	26,000
	TOTALS	427,000	217,000	17,000	10,000	-	-	671,000

CAPITAL REQUIREMENTS 1962-68

Ministry of Land and Survey

Revised to 1.2.62

No.	Project Title	1962-63	1963-64	1964-65	1965-66	1966-67	1967-68	Six Years 1962-68
K.1	Town Planning Division Headquarters Office	6,000	-	-	-	-	-	6,000
K.2	Two Santoni Plotters	2,400	-	-	-	-	-	2,400
K.3	Survey Records Building	5,000	-	-	-	-	-	5,000
K.4	Equipment to copy and preserve originals	1,000	500	500	500	-	-	2,500
K.5	Extension to Stores and air-conditioning	5,000	-	-	-	-	-	5,000
	TOTALS	19,400	500	500	500	-	-	20,900

CAPITAL REQUIREMENTS 1962-68

Ministry of Information

Revised to 1.2.62

No.	Project Title	1962-63	1963-64	1964-65	1965-66	1966-67	1967-68	Six Years 1962-68
L.1	Processing Plant	31,000	-	-	-	-	-	31,000
L.2	Regional Library: Expansion	59,000	-	-	-	-	-	59,000
	TOTALS	90,000	-	-	-	-	-	90,000

CAPITAL REQUIREMENTS 1962-68

Administrative and Judicial Buildings

Revised to 1.2.62

No.	Project Title	1962-63	1963-64	1964-65	1965-66	1966-67	1967-68	Six Years 1962-68
M.1	Provincial Office Extensions	20,000	15,000	7,000	15,000	4,200	-	61,200
M.2	Motor Licensing Offices	2,000	2,000	2,000	3,260	2,000	2,000	13,260
M.3	Wives Qtrs. Residencies	12,000	-	-	-	-	-	12,000
M.4	Wives Qtrs. Permsecs' Houses	12,000	-	-	-	-	-	12,000
M.5	Car and Kit Stores	5,000	-	5,000	5,300	-	-	15,300
M.6	Improvement to Temp. and Semi-permanent Qtrs.	2,000	2,000	2,000	3,000	2,000	2,000	13,000
M.7	Permanent RHH Extension	15,000	6,000	-	-	-	-	21,000
M.8	Office Blocks, Kaduna	-	40,000	40,000	-	40,000	-	120,000
M.9	Inst. of Admin. Library and Assembly Hall	-	-	51,000	-	-	-	51,000
M.10	Replacement of Aircraft	-	-	-	55,000	-	-	55,000
M.11	Construction & improvement of Airfields	4,000	5,500	4,000	4,000	4,000	4,000	25,500
M.12	High Court & Magistrates Court Buildings	19,000	7,200	7,200	-	7,400	-	40,000
M.13	Kano Planning Authority Offices	10,000	41,000	-	-	-	-	51,000
M.14	Current Projects C/forward	321,400	-	-	-	-	-	321,400
	TOTALS	422,400	118,700	118,200	85,560	59,600	8,000	812,460

CAPITAL REQUIREMENTS 1962-68

Ministry of Establishments & Training

Revised to 1.2.62

No.	Project Title	1962-63	1963-64	1964-65	1965-66	1966-67	1967-68	Six Years 1962-68
N.1	Staff Training Centre	31,000	10,000	5,000	5,000	5,000	5,000	61,000
	TOTALS	31,000	10,000	5,000	5,000	5,000	5,000	61,000

CAPITAL REQUIREMENTS 1962-68

Ministry of Internal Affairs

Revised to 1.2.62

No.	Project Title	1962-63	1963-64	1964-65	1965-66	1966-67	1967-68	Six Years 1962-68
0.1	Buildings	45,734	45,500	-	-	-	-	91,234
0.2	Vehicles	-	6,000	-	-	-	-	6,000
	TOTALS	45,734	51,500	-	-	-	-	97,234